

THE GEOGRAPHICAL MAGAZINE

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THE GEOGRAPHICAL MAGAZINE

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How We Are Governed

I. The Houses of Parliament

by QUINTIN HOGG, M.P.

Parliamentary institutions are the most cherished heritage of the people of the British Isles; but how many of those who would be prepared to defend these institutions even with their lives understand how they work? In this and two subsequent articles, the Member for Oxford City in the present House of Commons describes the evolution and functioning of a system as complex in its ramifications as the structure which houses it

ON the 28th of October 1943, Mr Winston Churchill moved in the House of Commons to set up a Committee for the rebuilding of the Chamber destroyed in 1941, without modification of its essential features. "We begin," he said, "by shaping our buildings, afterwards our buildings shape us." Accordingly the House voted by an overwhelming majority that their new Chamber was to be oblong and not horse-shoe shape, was to be far too small to give seating accommodation to all its members at the same time, and was to be as uncomfortable as can be imagined, to be fitted with benches like the choir of a church and not with chairs like most other places of assembly in the world, still less with desks or separate seats for each member.

This vote was supported, not on the practical ground that the Chamber which was to be rebuilt had to fit into the architectural plan of an existing structure, but on high constitutional doctrine. The oblong form of the Chamber is dictated by our unconquerable predilection for the party system, its small size and the absence of appointments by our immemorial habit of conducting important matters in an informal way.

The semicircular assembly [said the Prime Minister], which appeals to the political theorists, enables every individual and every group to move round the centre adopting various shades of pink according as the weather changes. I am a convinced supporter of the Party system in preference to the group system. I have seen many earnest and ardent Parliaments destroyed by the group system. The Party system is much favoured by the oblong form of Chamber. It is easy for an individual to move through these insensible gradations from Left to Right, but the act of crossing the floor is one which requires serious consideration. I am well informed on this matter for I have accomplished that difficult process not only once but twice. Logic is a poor guide compared with custom; Logic, which has erected in so many countries semicircular assemblies which give every member not only a seat to sit on but often a desk to write at with a lid to bang

has proved fatal to Parliamentary Government as we know it here in its home and in the land of its birth.

He went on to deal with the limitation of size:

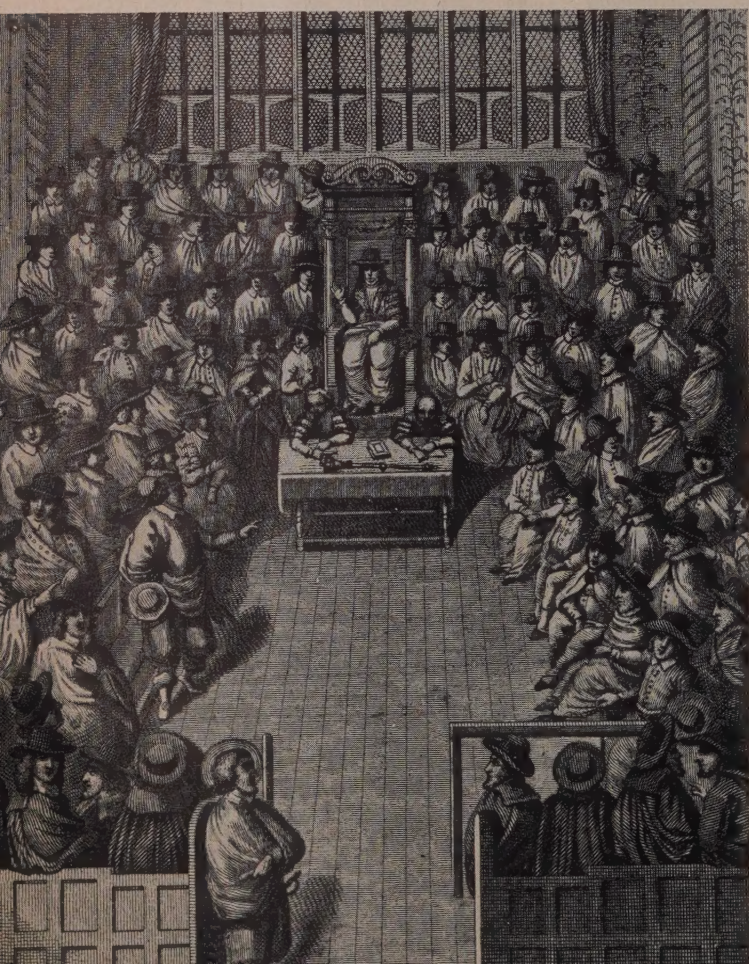
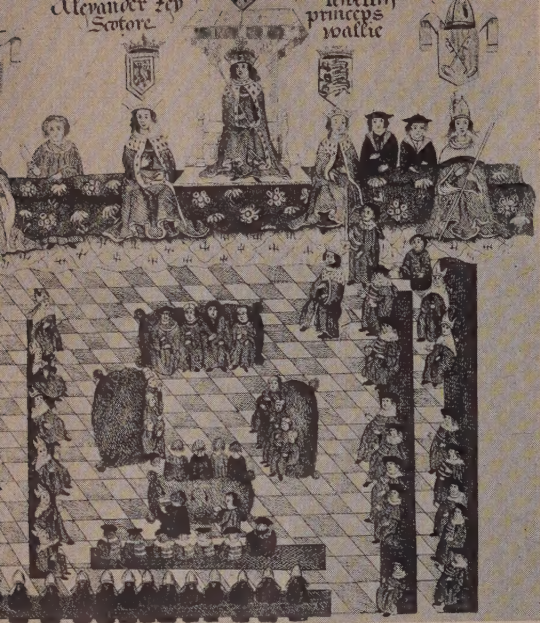
If the House [he said] is big enough to contain all its members, nine-tenths of its debates will be conducted in the depressing atmosphere of an almost empty or half-empty Chamber. The essence of good House of Commons speaking is the conversational style, the facility for quick informal interruptions and interchanges. Harangues from a rostrum would be a bad substitute for the conversational style in which so much of our business is done. But the conversational style requires a fairly small space and there should be on great occasions a sense of crowd and urgency.

* * *

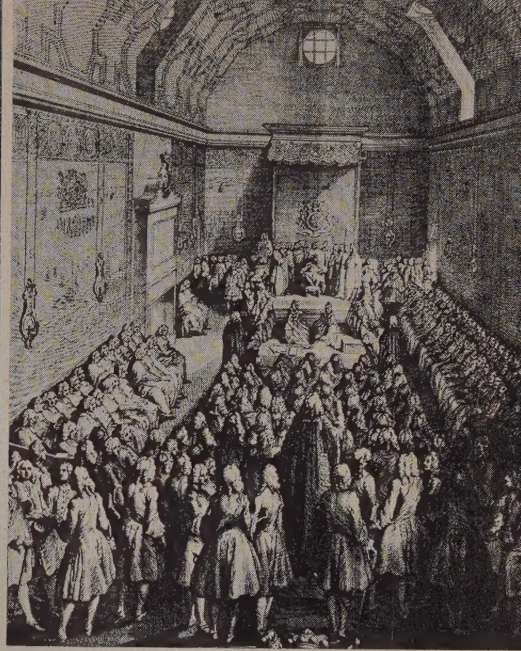
This pronouncement was by far the most important on our constitutional system that has been made in years, and it is characteristic of British Parliamentary life that this acknowledged master of the Parliamentary art should have chosen this occasion for making it a debate about the physical structure in which future discussions would be carried on. A review of our present-day constitutional arrangements begins therefore not unnaturally with a description of the central building in which Parliament assembles.

"Government," said Disraeli, "is either by force or by tradition." He might have said "either by force or by discussion". Our own form of Government is alike traditional and by means of discussion, and the form of its building and of its procedure alike are deeply rooted in the past.

In the 13th century the Kings of England found the problems of the day too complex to be dealt with by the purely feudal polity which the Conqueror had founded. They therefore adopted the practice of taking their subjects into Council. At first these Councils were held in various towns, and at first there may have been many different arrangements under which they met, but by the middle of

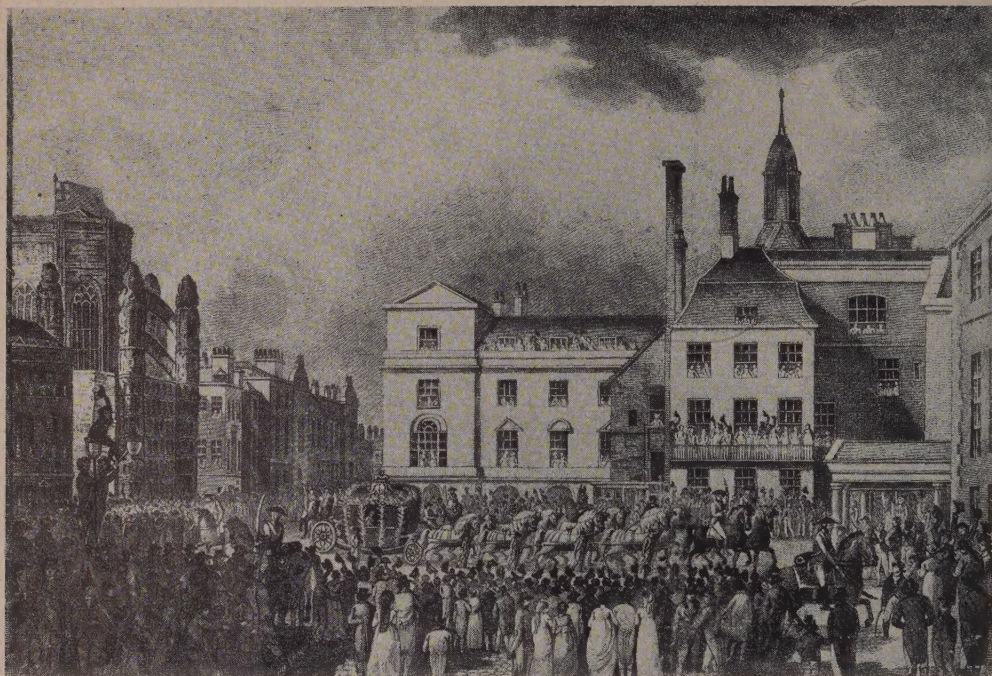


(Above, left) A very early picture of Parliament in session shows Edward I on the throne with the King of Scotland at his right hand; (right) Westminster Hall during the trial of John Lambert who, accused of heresy, appealed to Henry VIII as supreme head of the Church and disputed with him for five hours before an assembly of spiritual and temporal peers but was condemned to death and burnt at Smithfield in 1538. (Left) The House of Commons in 1656—two years before the death of Oliver Cromwell. (Opposite, top left) Sir Robert Walpole, England's first Prime Minister, addressing the House of Commons in 1742—his last year of office; (top right) George II on his throne in the Lords receiving the Commons. (Right) Pitt the Younger speaking in 1793 in the old House of Commons in St Stephen's Chapel. Among seated members are Fox and Canning. The Speaker is Addington, who, in 1801, succeeded Pitt as Premier



Pictures from Rischgita Studios





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(Above) George III on his way to open Parliament in 1804. (Below) South-east corner of the Princes Chamber and the old House of Lords from a drawing of 1809. (Opposite) The Lords passing the great Reform Bill in June, 1832. The diarist, Greville, described it as "a sweeping measure indeed," and the excitement it aroused in the public as "beyond anything I ever saw. . . . Nothing talked of, thought of, dreamed of but Reform." The Duke of Wellington is standing in the foreground to the right. On the next page is a contemporary print of the fire of 1834, when the medieval Palace of Westminster and all its ancillary buildings except Westminster Hall, the Crypt Chapel and the Cloisters were almost totally destroyed

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the 14th century Parliament sat regularly at Westminster in two distinct Houses as at present, the Lords spiritual and temporal sitting in one Chamber and the Knights and burgesses of the Commons sitting elsewhere under the presidency of a Prolocutor or Speaker. The main body of the Clergy, regularly summoned by proclamation, early ceased to observe the invitation and had their own dealings with the Crown through their Convocations.

The place at which the meetings were held was the Palace of Westminster, at the time and until the acquisition of Whitehall by Henry VIII from Cardinal Wolsey, the actual residence of the King.

Until 1801, when they moved to the Court of Requests (a building on the site of the present statue of Richard Cœur de Lion), the Lords met in a building at the south end of the Palace. Until 1547 the Commons sat in the Chapter House of Westminster Abbey, which, in consequence, remains to this day under the control of the Office of Works instead of the Dean and Chapter. But in that year they moved to their historic home, St Stephen's Chapel, in the Palace itself. It was the shape and size of St Stephen's Chapel which gave to the House of Commons its distinctive oblong shape, its inadequate accommodation and the choir-like benches so much praised by Mr Churchill, and to this day when the Speaker comes in at prayers he

A 'scene' in the House of Commons, as the early Victorian cartoonist, Phiz, saw it



Rischgitz Studios

bows to the empty Chair which stands in front of the place formerly occupied by the altar.

* * *

The shape of the House of Lords has remained substantially the same from the earliest time. An extremely early picture depicting a Parliament of King Edward the First, with the King of Scotland sitting at his right hand, depicts the throne, the side benches, the cross benches and the central square formed by the Woolsack, and the seats of the Clerks and Commissioners arranged in a manner very similar if not exactly the same as the present House of Lords since 1941, temporarily set up in the King's Robing Chamber.

* * *

The history of the buildings of Parliament is the history of four historic fires. The Chapel of St Stephen, founded apparently by the king of that name, was burnt down in the reign of Edward the First, who rebuilt the chapel in the historic form which housed the Commons for 300 years afterwards. The second fire was in 1512 when the old Royal residence was greatly damaged and thereafter abandoned by the King completely to the Parliament men. The third fire took place on October 16, 1834, when the medieval Palace and all its ancillary buildings, apart from the Westminster Hall, the Crypt Chapel and the Cloisters (now shamefully abused as the Members' Cloakroom), were almost totally destroyed. The fourth and last fire was caused in May 1941 by incendiary bombs from German aircraft during one of the greatest air raids on London, and this has necessitated the present rebuilding of the House of Commons Chamber. Another parallel is also interesting. At present the House of Commons meets in the almost undamaged Chamber of the House of Lords. In this it is only following precedent. After the fire of 1834 while the present House was being rebuilt, the House of Lords of that time vacated the Court of Requests and lent the hospitality of its Chamber to the House of Commons, as its successor has done at the present day. Some of the earliest and best speeches of Gladstone and Disraeli were therefore made in the Chamber of the House of Lords.

* * *

The design of the present building is extremely complicated, not to say extravagant, and in proportion to the space covered, the accommodation provided is both scanty and inconvenient.

The building lies along the bank of the



Rischgilt Studios

Gladstone, Prime Minister, making a speech in the Commons in 1882. He was then seventy-three years old and had been in Parliament for fifty years

Thames which at Westminster Bridge is flowing almost from due south to due north. The central plan lies in the arrangement of the two Chambers situated on the first floor opposite to one another and connected by a series of passages and lobbies, with the throne at the south and the Speaker's Chair at the north of the axis so created, in such a way that with all the doors open the throne is visible from the Speaker's Chair. This line of corridors and lobbies is joined at its centre in the large Central Lobby by another axis coming in at right angles from the main public entrance at St Stephen's porch. Parallel with the main axis are two lines of open courts surrounded by rooms and corridors: on the west, Star Chamber Court, Cloister Court, St Stephen's Court, State Offices Court and Chancellor's Court; on the east, Commons Court, Commons Inner Court, Peers' Inner Court and Royal Court. East again lie the Speaker's Library, Commons Library, Members' Smoking Room, Members' Dining Room and Peers' Library.

Furthest to the east runs the Terrace along the riverside almost the whole length of the building. West of Star Chamber Court and to the north of St Stephen's porch is Westminster Hall, by far the oldest building of any in the Palace, being in the main of the time of William Rufus, alike the immemorial home of the English Common Law and the scene of many dramatic events in English history.

The fire of 1941 was the occasion of another remarkable coincidence. When a survey was made for suitable timber to repair the roof of Westminster Hall after the air raid, it was reported that the only oaks suitable for the purpose in the country were those on Sir George Courthope's estate in Sussex, and the records show that this very estate, Whiligh, provided the original timbers for the roof of William Rufus.

Within the complicated framework of these buildings are fitted countless apartments, a barber's shop, baths, a tea-room, a bar, several dining-rooms, a post-office, an office

for the sale of Government publications, rooms for almost all the Ministers, a typing agency and, on the second floor, a whole series of committee rooms. At the extreme north-east corner is the Speaker's residence, where he actually lives, with an equal house on the opposite side said to have been intended for the Lord Chancellor but in fact never used by him in living memory. At the north-west corner is the Clock Tower and at the south-west the Victoria Tower by the Royal entrance. It had been the intention of Sir Charles Barry, the designer of the new building, to include the whole of New Palace Yard with lines of official offices surmounted by an additional tower, but by the time that this scheme was mooted his backers had had enough and the plan was never adopted. The execution of his design had been thwarted throughout by continuous interference of interested and disinterested critics and he died a disappointed and disillusioned man.

It is obvious that the new repairs will not fundamentally alter the structure. The building is largely undamaged or repairable and, practically speaking, the only irreparable harm done is to the old House of Commons Chamber which is completely burnt out and

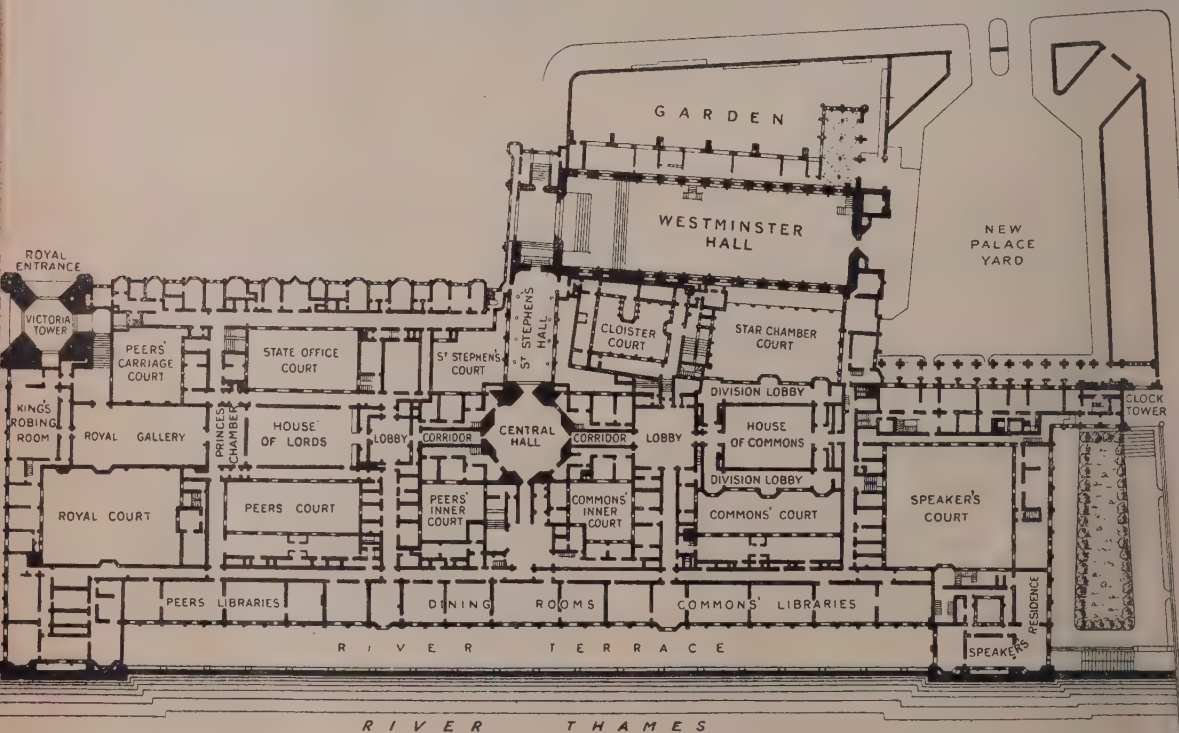
neatly removed from the centre of the building to show the extraordinary Victorian ventilation and heating arrangements, the queer predecessors of modern air conditioning.

* * *

Now let me invite the reader to take a look at the Houses of Parliament about two o'clock on a sleepy afternoon in February 1944.

We will begin by taking a look into the Chamber and see what is going on. The House is in Committee on the Finance Bill. The Speaker's Chair is therefore empty and the mace below the Table, as it always is when the House is in Committee; in the Chair at the Table Commander Charles Williams, the Conservative member for Torquay, is presiding. The House is in the middle of a debate on the Education Bill. An honourable member is moving an amendment in favour of retaining what are called Part III authorities; an important matter perhaps, but not one on which the fate of the Empire is likely to depend.

Several well-known speakers have contributed to the debate, and after a spirited speech from Mr Moelwyn Hughes of Carmarthen, and Mr Ralph Etherton, the young



Conservative from Liverpool, the President of the Board and Mr Chuter Ede look a bit uncomfortable on the Treasury bench. Later on the House will divide and the Government is concerned about its majority. You will notice that there are not more than forty or fifty members in the Chamber. However, I think we can leave them to talk it out. Come with me back into the Central Lobby and on to the Old Members' Lobby next to the place where the old House of Commons has been removed from the centre of the building as clear as a cork from a bottle.

Turn right, and go through the door at the end of the passage and you are in the library. If you walk with me through this building you will see at least as many members as in the Chamber itself.

They are nearly all of them working—some of them are evidently preparing speeches. Mr Molson (for instance) of High Peak, who likes to be accurate, is taking down an old Hansard from a shelf. He is obviously

verifying a reference from one of his opponent's speeches.

Others are dealing with letters. A fairly well-known member like Mr Shinwell or Sir Archibald Southby may get up to forty letters a day. You get no free secretarial services in the House of Commons, and a large proportion of members not merely deal with letters themselves but actually write them. Well there they are, dealing with them now. Often a letter from a constituent will necessitate writing two or three others to different people besides acknowledging the letter itself. A typical one which I received recently concerned a prisoner of war and necessitated writing to the Principal of his College at Oxford, to the Secretary of State for War and the President of the Board of Education, before I could deal with the matter at all. A good many of these letters are written in the library.

Now we will come out of the library and visit the tea-room, and the smoking-room on

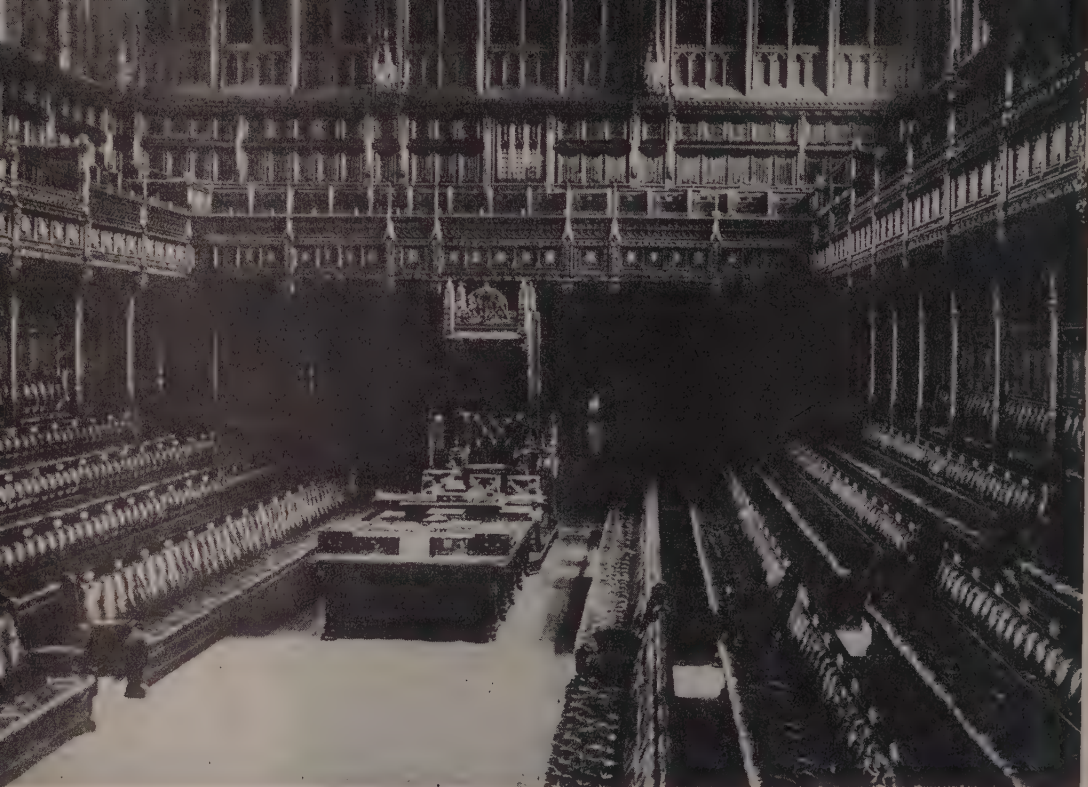
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(Opposite) Ground plan of the main floor of the Palace of Westminster, which, until Henry VIII acquired Whitehall, was the residence of the Kings of England. (Right) The Houses of Parliament from the river. (Below) 'The public' waiting to enter the House of Commons at St Stephen's Porch, New Palace Yard



John H. Stone



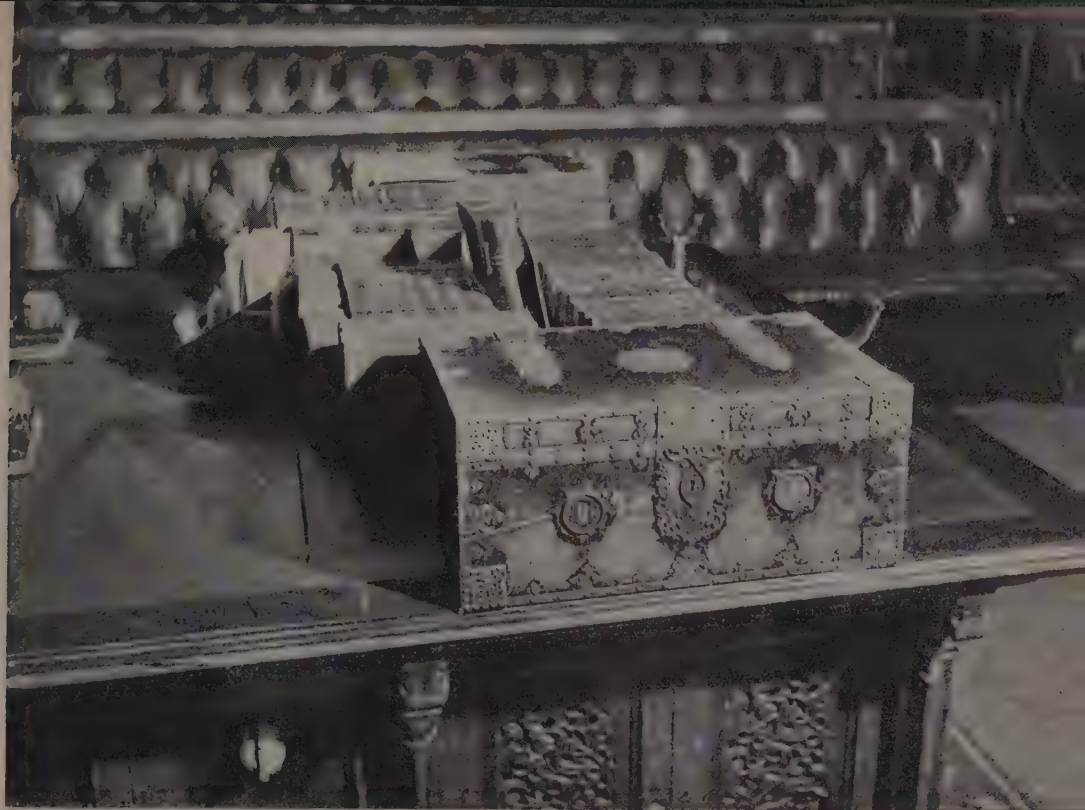


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(Above) Pre-war view of the oblong Chamber of the House of Commons showing the historical choir-like front and back benches and the Speaker's chair. (Opposite, top) Close-up of the large brass-bound box which stands on the Table in front of the Prime Minister: that is, on the Ministerial side of the House, to the Speaker's right. Its top has many dents, made by generations of emphatic speakers; inside it is the Roll of Parliament signed by Members when they take the oath; beside it are books of reference. The mace is laid in front of it, at the end of the Table, in full view of the House, when the Speaker occupies the Chair. (Left) One of the corridors leading to the Chamber of the House of Commons seen from the lobby. (Opposite, bottom) The crypt of St Stephen's Hall

Fox Photos





The Times

Crater made by a bomb, during the 1941 air-raids, just outside the Houses of Parliament

our way up to the Committee floor. They are pretty empty at this hour of the day, but you will see one or two members. I am not going to pretend they are very hard at work. But most of them are doing something fairly useful. We are elected to Parliament as members of a political party and sometimes even of a section within the party. But most of us like to get to understand the other fellow's point of view, whether he belongs to a different wing of our own party or sits on the other side of the House. The smoking-room and the tea-room are the places where you often get to know people whose views interest you. Sometimes a question which transcends ordinary party differences crops up. Quite often discussions in the smoking-room have started quite important movements.

However, we have no more time for that at the moment. We take the lift opposite the smoking-room and we are soon on the Committee Room floor. In peace-time it is in the committee rooms that the Standing Committees to which Bills are referred take

place. These Committees are held in public; but now by far the most important meetings are held in private.

Let us see what they are. We will go first to Committee Room No. 14, which holds the largest of the meetings. It is a large room arranged like the House of Commons itself, except that it has a sort of platform to seat a row of distinguished people as well as the chairman. There is a picture behind representing the English fleet pursuing the Spaniards against Fowey, said to have been designed by the Prince Consort. The room is empty now and in it are held the larger meetings such as the Scottish Grand Committee, the party meetings, the Conservative members' meeting every Wednesday afternoon and the Labour members' every morning at about half-past nine.

But many of the committee meetings are now concerned with party politics. Recently Mr Roy Harrod, the economist, addressed a meeting of Members of Parliament in the Grand Committee Room on the birth-rate; earlier the same session a joint committee meeting was held here to discuss the plight of the Jews at which the Archbishop of Canterbury spoke. If we go now next door, past the Reporters' Room, we shall see a distinguished ex-soldier addressing a meeting of some forty or fifty M.P.s on the internal state of Italy. It is a meeting summoned by Mr Ivor Thomas who seems, this afternoon, to be in two or three places at once. Further on a group like the Committee which discusses air policy, or a larger Committee like the Tory Reform Committee, may be sitting. In another of the rooms the Select Committee on National Expenditure (an official body) is gruelling some wretched civil servant about his accounts.

The object of all these Committees, formal or informal, is to hammer out policy before presenting it in open debate in the House of Commons. This is done either by discussion between M.P.s themselves or by hearing distinguished experts. I will give you an example of how the thing works in a moment.

But it is time we came down again to the main floor. If we turn to the right when we get to the bottom, and skirt the corridor at the side of the old Chamber, we come, first to the Speaker's rooms, and then, if we turn left, we get to the rooms belonging to Ministers.

It is here that Ministers do part of their work or receive deputations of members. If we are lucky we shall see a deputation at one of the Minister's rooms just coming out now. No doubt there are others inside.



Bill Brandt

M.P.s take their turn at fire-watching on the roof of the House of Commons

Now the point I am making is that on the whole very few of the members we have been seeing have been wasting their time, although three out of four have been outside the actual Chamber, neither those in the library, nor those in deputations, nor on the Committee floor, nor even those in the smoking-rooms. Add to these the ones who are on service, or who are fulfilling some engagement in the country which they have got to do from time to time, if only to keep in touch with the electors, and I think you will begin to see why there were only forty or fifty members in the Chamber listening to Mr Thomas's amendment.

Before you go I would like you to come back into the Central Lobby for a moment. Crowding round the policeman there are a whole group of people. They are 'the public', and the policeman is giving each a green card to fill up. Each green card represents a request to a member in the House to leave whatever he happens to be doing and attend to the needs of the constituents. Sometimes these needs are important—sometimes less so. But at all events poor 'Mr Snooks' has got to come out to see. You can see several members talking to their visitors in the lobby. Now and again you will see one of the attendants going round

with a sheaf of green cards and a few pink slips. The pink slips are telephone messages asking a member to come out of the Chamber and ring somebody up.

A fairly good example of the way this sort of thing works might be given by a recent debate on Civil Aviation.

This was the first time for a long time that members had discussed this matter in public. But it would be wrong to assume from this that it was the first time that the matter had been discussed.

Actually the debate was arranged through the activities of a small group of members who had interested themselves in the matter for months—they included Mr Perkins of Stroud, Mrs Mavis Tate (Frome, Somerset), Wing-Commander Wright and Mr Ronald Tree (Harborough).

They had been discussing this matter privately for months, and perhaps even for years. They had been getting letters which they had answered in the library, telephone slips and green cards; they had held private meetings on the Committee floor. They had interested other members in the smoking-room. They had gone to other committee meetings and raised the subject. They had visited Ministers in their private rooms in deputations or alone. They had written

papers and circulars. They had collected information at Question time. They had threatened to raise the matter on the adjournment. They had put down two motions on the Order Paper and collected about a hundred and forty signatures for each. They had then asked questions about it when 'business' is discussed on Thursday, and finally the Whips had given a promise that the matter should be discussed on the floor of the House of Commons, and the debate was set to take place on the third reading of the Consolidated Fund Bill on Tuesday the 1st of June.

It will be seen from this that weeks and months of patient work had gone into the preparation of the debate or it would never have been held. Hours had gone in the preparation of the speeches. But all the House even heard of it in the Chamber was one day's debate, and all the public even heard was the shortened summary in the newspapers or in the wireless news.

Well, the debate was held, and it was a success at least because it showed the danger into which we are drifting by not being able to agree to a policy among ourselves. But while it was being held other people were, no doubt, making preparation to raise other subjects at a later time.

One such person was no doubt the recent critic of the Government on "pay as you earn". On Thursday the Chancellor of the Exchequer promised to reconsider the position of temporary civil servants. This is the result of months of work by various Members of Parliament. Letters have been written; questions have been asked; adjournments have been threatened; a full debate has been



John H. Stone

Symbolical and triumphant, Richard I, Cœur de Lion, stands at the threshold of the Houses of Parliament. His sword was bent in an air raid, and it has been suggested that it should be left so to commemorate the blitz

held and found unsatisfactory; and finally, just as we were beginning to threaten that a vote might be taken against the Government, the patient work is rewarded, and another advance is promised as the result of a proper combination of diplomacy and firmness.

* * *

We shape the building; the building shapes us. Then we shape the building again to suit ourselves. When the New Chamber is finished, a new chapter in the history of Parliament will be opened. I for one am not sorry that it will lead on continuously from the past.

On Leave in the Djebel Druse

by E. R. MOULTON-BARRETT

My reasons for going to the Djebel Druse for a few days' leave were threefold. I wanted to get away from the British Army for a short time, I wanted to see the great Roman remains of the Provincia Arabia, and as a consequence of reading Gertrude Bell's *Letters* I wanted to meet the Druses themselves.

The O.C.P. (Office Cereales Pannifiables), the great grain-distributing organization of Syria and the Lebanon, gave me and my companions a lift to Ezrea. There by good fortune we got a further lift to Soueida, the chief town of the Djebel Druse. It is a pleasant place on the slopes of the hills looking out across the plain of the Hauran towards Mount Hermon. On the east of the town is the European quarter with the houses of the French administration; lower down the hill to the west lies the Druse town of cobbled streets, stone houses and mud roofs.

Many of the houses have carved Roman door lintels, and one continually notices Roman-dressed stones in the walls. There is one fine Roman arch still standing. There is also an excellent little museum of local antiquities arranged by the army *aumônier*, Père Macle. In the days of the Nabatean Arabs the town was called Soada, in Roman times it was rechristened Dionysia, and since the Arab invasion it has reverted to a variation of its original name. The present occupations of its inhabitants are farming, local trade and certain handicrafts such as weaving saddle-bags from the dyed local wool.

In the afternoon we walked to an Qawat, Kanath of the Bible and Canata City of the Decapolis in Roman times, over a rough track made of lava boulders. The track winds round the hills, through woods of stunted oaks and between high stone walls. Suddenly, as one turns a corner, the magnificent pillars of an old temple standing on a spur of the hills appear, standing 35-feet high on a platform raised above the surrounding fig trees. Around the foundations, among the fig trees, lie countless fragments of pillars, pediments and statuary.

As we came into the village of Qanawat

we saw more evidence of Roman occupation. The entrance to the Druse church is an unspoilt pair of heavy stone doors. When we had toured the village and looked at its paved market-place, its aqueducts, millhouses with tapered watershoots leading in to them, its theatre and its early church, we were invited to drink coffee with one of the local sheiks.

The coffee-room was on top of the house, built of mud-bricks and roofed with smoke-blackened sticks and more mud. We reached it by an outside staircase. The room was low with one window looking across the valley towards the theatre. Except on the side of the entrance, the floor was slightly raised and covered with painted white felt rugs. In the centre was a hearth, deep in white wood ash, on which were three tall coffee-pots with pointed spouts. In front of them were small handleless cups standing on a tray. All the men on entering had left their shoes beside the entrance; we made to do the same but were told that it was not expected of us.

After much hand-shaking and many polite greetings, we sat down on the cushions with





Oscar Marcus



Oscar Marcus

(Left) At Soueida, the chief town of the Djebel Druse: the little son of a noble Druse. (Above) Women of Soueida in the market square queueing up for their daily supply of water. (Right) Druse women with water-containers made out of petrol cans



Oscar Marcus



our backs to the wall. A venerable old man sat on the solitary chair in the centre of the room. He wore a long white beard and a black outer robe over white, and on his head was a fez wrapped in masses of white cotton cloth that stood out like a square tyre from a wheel. After all the preliminaries we feared conversation would be difficult, our Arabic being scanty, but to our surprise the old man, who was head of the family, spoke to us in English. He told us haltingly that in his youth he had been in New York and South America, and though he had not spoken English for many years he still remembered a little. This, eked out with our Arabic, made simple conversation possible. While we talked we drank small cups of bitter aromatic coffee, and ate grapes from a huge bowl. The grapes of the Djebel Druse are luscious and we were lucky to be there at the right season. We talked of the war, and the Druse Regiment in which two of his sons were serving; also of the age and beauty of Qanawat; but we had to avoid politics, that being the one subject we were asked not to discuss. After about an hour's talk and many farewells, we left, once more passing the temple on the hillside while the sun was setting towards Mount Hermon.

The next day was fair and hot, and we decided to walk to Shabha, the Roman Philippopolis. This was the home town of the Emperor Philip the Arab, A.D. 244-9, and



(Opposite, top) Remains of a Roman Temple just south of Qanawat and the west front of an early church constructed from the stones of a 2nd-century temple; (bottom) the ancient doorway of the Basilica, Qanawat. (Above, left) Main street of Shabha, showing Roman paving; (above, right) Druse women drawing water at Shabha. (Right) South Gate, Shabha. (Below) Roman arch over a Shabha street





(Above) Corinthian pillars and Roman walls at Bosra, which stands on rising ground and dominates the plain. It is still supplied with water from the great Roman cisterns. (Below) The gallery of the Roman theatre at Bosra



Photographs by the author

was named after him. It lies on the north edge of the Djebel. The route was again a rough boulder track round the edge of the hills; there is a poor motor road but it is rather longer. It was a dull hot walk, but we were amply rewarded by our first view of the southern Roman gateway with a long paved street stretching up to the centre of the town.

The most interesting remains in Shabha are the four main paved streets leading to the four main gateways, from which run the straight Roman roads over the hills. There is also a fine, small Roman theatre which could be used today, so good is its state of preservation. As usual we drank coffee and ate grapes, in one of the local houses and at the police station.

Our walk back to Soueida seemed long, as it was dark before we left the boulder track. However, it was cooler than it had been during the day. While the light lasted we kept seeing the remains of Roman pillars and dressed stones. Several times we were invited to eat at villages on our way, but it was too late to delay. We were refreshed by presents of grapes from the vineyards as we passed. Everywhere we met with kindness and hospitality. The next day we stopped at Soueida, studied the museum, and drank and talked with the officers of the French garrison.

On Monday morning before we left we saw an amusing demonstration. The Syrian Parliamentary elections had lately taken place, and when the government was formed there was no Druse in the cabinet. This hurt the pride of the Druses, and a small body of them, armed to the teeth and dressed in their best robes, came to protest outside the house of the Emir Hassan Bey Atrash, their chief deputy. No one could explain to us what they expected to gain by it. It was all very friendly, the forty or fifty men shouted some slogan in unison like a crowd at an American football match, and discharged their rifles in the air in volley after volley. It was marvellous that no one was hurt; the police took no notice of the proceedings and after a speech from the Emir the meeting broke up.

That morning we moved on to Deraa, hitch-hiking on the most rickety of Arab

lorries. Deraa, not an impressive town although it is supposed to have been the capital of Og, King of Bashan, is now the principal town of the Hauran, the rich plain lying between the Djebel Druse and the Mount Hermon group. It is a railway junction, and on the easiest route to Bosra Eski Cham, the last place that we were to visit.

Bosra stands on a slight rise of the black basalt and dominates the plain. To this day it is supplied with water from the great Roman cisterns; there are also some small springs to the west of the town. From a distance the black towers of the early churches and mosques and the great citadel stand high above the flat mud roofs of the modern town. Today it is only a small isolated town, but full of evidence of the periods of its greatness. In the days of Petra and Palmyra it was an important caravan city, and continued to be until the Arab invasion. In later Roman times it was the headquarters of the Third Cyrenaican Legion. Later still in Byzantine times it had been an important Cathedral city. (According to tradition, it was here that Mohammed, the nephew of a caravan leader, first learnt of the Christian beliefs.) Finally in 643 it fell to the Arabs.

Today as one enters from the west Roman gate there is a fine paved avenue leading to a triumphal arch. As we walked up it we found villagers excavating a waste patch for Roman stones to build their houses. There were pillars standing in the alley-ways and appearing out of the roofs of houses, marking the sites of Roman temples and early Christian churches. Like every other town we visited, many of the houses had Roman door lintels and carved stones set in the walls. The last place we visited was the Citadel, a remarkable building that encloses the Roman theatre, with the barracks built inside the auditorium.

Our tour of this lovely and largely forgotten part of the world was brief. But we saw that even here changes are taking place and that the growing Druse communities are obliterating the great Roman remains as their towns and villages expand. And we brought away memories of hospitality, beauty and even peace which made it a true 'leave' from army life.



Photographs by Peter Hill

In Transjordan

Neighbouring the Djebel Druse (described in the preceding article) is Transjordan, an autonomous Arab state under the British Mandate. These four pictures show some of





the pastoral and agricultural background so often described in the Old Testament.

The people are mainly beduin Arabs, but in recent times many of them have abandoned their traditional nomadic habit of moving their flocks of sheep, camels and goats continually to fresh pastures and adopted a more settled existence, still living in their black tents but remaining near a village or town and cultivating the land. Each year they harvest their crops by hand: reaping the corn with a sickle, carrying sheaves on donkeys guided by the women, threshing with oxen and a heavy wooden 'sledge' and winnowing the grain by tossing it in the air





Lima, the City of the Kings

by F. A. KIRKPATRICK, F.R.Hist.S.

Peru was one of the first South American States to break with the Axis. In recognition of her longstanding friendship with Britain and her services to the Allied cause, the status of the British Legation in Lima was recently raised to that of Embassy. Mr Kirkpatrick, an authority on Latin America and its history, gives in this article an intimate description of the city and its background. The picture above shows the Plaza San Martín, centre of modern Lima

As the passenger ship, after coasting the Pacific shore for many miles, steams into the spacious harbour of Callao, the traveller gets his first view of the city of Lima, capital of the Peruvian Republic and in former days capital of half the continent of South America. The city is some eight miles distant from the coast, but it stands on rising ground, 500 feet above sea-level, close to the foothills of the Andes. Thus the twin towers of the cathedral and the towers of other churches—for Lima is a city of many churches—can be discerned from a distance, rising above the general mass of buildings of a great city.

The port of Callao, founded in 1537, two years after the foundation of Lima, belongs to the city of Lima, just as Leith belongs to the city of Edinburgh or the Piraeus to the city of Athens. More than that, it was the safe anchorage within this spacious bay which more than anything else determined the choice of a site for the capital. The coast of Peru, like the rest of the western coast of South America, is poor in natural harbours. When, therefore, Francisco Pizarro, conqueror and Spanish Governor of Peru, resolved to set up a new capital on the coastal plain between the mountains and the sea, his choice

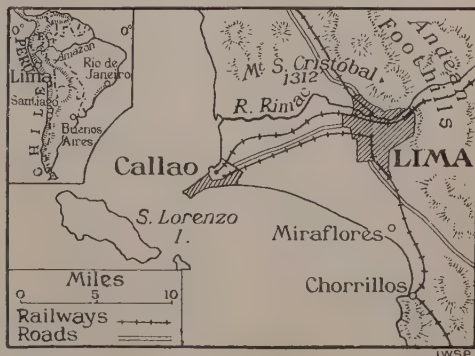
of a site was determined by two natural advantages: first, the River Rimac, which, fed by Andine snows, brings water to a rainless coast; and second, this wide and secure bay, protected from the heavy swell prevailing on this coast and from ocean gales—though gales are not very frequent—by a projecting point of land and by the island of San Lorenzo situated at the entrance to the bay; a configuration which provides, as Prescott says, in his classic *Conquest of Peru*, “a commodious haven for the commerce that the prophetic eye of the founder saw would one day—and no very distant one—float on its waters”. The sagacious prevision of Francisco Pizarro, and Prescott’s comment, have been abundantly justified by results. Callao is a busy place with all the movement and activity of a great port, the chief channel of commerce for a national capital and an extensive country. The place has doubled its population during the past generation and now numbers 75,000 inhabitants. The ‘inner harbour’ is furnished with all the equipment of a modern port; and the largest ocean-going ships—as well as the many smaller vessels engaged in coastal trade—are moored alongside broad and solid wharves. Here are embarked for export the copper and silver conveyed by rail from the Andine heights, as well as the varied produce of the irrigated coastal plain and the mountain valleys.

The name ‘Callao’ evokes two notable events: first, the earthquake and tidal wave of 1746, which completely destroyed the original town; and second, the famous exploit of Thomas, Lord Cochrane, who commanded a joint Chilean-Peruvian war-fleet in the war of independence. On the night of November 5, 1820, Cochrane, by a characteristic combination of ruse and audacity, boarded, captured and carried off the Spanish frigate *Esmeraldas*, anchored under the guns of the fortress.

Twenty minutes’ run on a good road conveys the traveller to a very different scene, the heart of the national capital. This sudden contrast between the port and the capital suggests a question—a question for consideration rather than for a decisive answer: Is it desirable that the chief port of a country should also be the political capital, as in the case of Buenos Aires and Rio de Janeiro, to take the two nearest examples, great capital cities which would be inconceivable without their ports; or is it preferable that the national capital, the seat of government, should be separate and distinct, like Santiago de Chile and Lima? In the case of Lima, the material difference, the diminution in mere magnitude,

is incontestable. If the 75,000 people of Callao were added to the 625,000 of Lima, the increase in mere size and number would make an imposing total, besides the great volume of business, the concentration of wealth in one place. On the other hand, the port and the bulk of material business being set apart, the capital gains in dignity, spaciousness, and culture of a more tranquil and leisurely kind; a more truly urbane culture.

The city of Lima is best visited by starting from the centre, the historic nucleus which was the starting-point of its growth: the square known as the Plaza de Armas, a name which recalls the martial trappings of the old vice-regal court. Francisco Pizarro himself marked out this square and fixed the sites of the cathedral, the town hall and the governor’s residence, later to become the palace of the viceroy. From the group of Spaniards—some thirty in number—who were to be the first householders of the infant city, Pizarro appointed town councillors and two magistrates (*alcaldes*). For every city in the Spanish Indies was, from its inception, fully organized both in its civic or constitutional character and in its outward form, that is to say the rectangular chessboard pattern of streets intersecting one another at right angles and enclosing blocks of equal size, the first streets being traced from the corners of the central square. Pizarro, the founder, could not read or sign his own name. As Cunninghame-Graham remarked, these accomplishments are not necessary to a conqueror. And here is visible evidence that they were not necessary to a ruler of men laying out the plan of a great city. To this new capital the founder gave the lofty and somewhat cumbersome title “The City of the Kings” (*La Ciudad de los Reyes*) to commemorate the date when the construction—begun a few days later by a host of Indian labourers and artificers—was inaugurated or determined; January 6, 1535,



the Feast of the Epiphany, the day when three Eastern kings were led by a star to Bethlehem. Some have supposed that the name was given in honour of the sovereigns of Spain, Charles and his mother Joanna, but the coat-of-arms afterwards granted to the city by royal authority, a star and three crowns, denotes that the birthday of the city was the Feast of the Epiphany. For a generation or more the full title 'The City of the Kings' was officially used; but the more convenient vernacular title 'Lima', a corruption of the Indian word 'Rimac', finally prevailed.

The Plaza de Armas still retains its pristine Spanish character. On the eastern side stands the cathedral flanked by the archbishop's residence. Two towers, rising from the broad façade of the cathedral, dominate the Plaza, giving an appropriate tone of solemnity to this central point of The City of the Kings, which was also the home of the early Bishop Santo Toribio, canonized for his

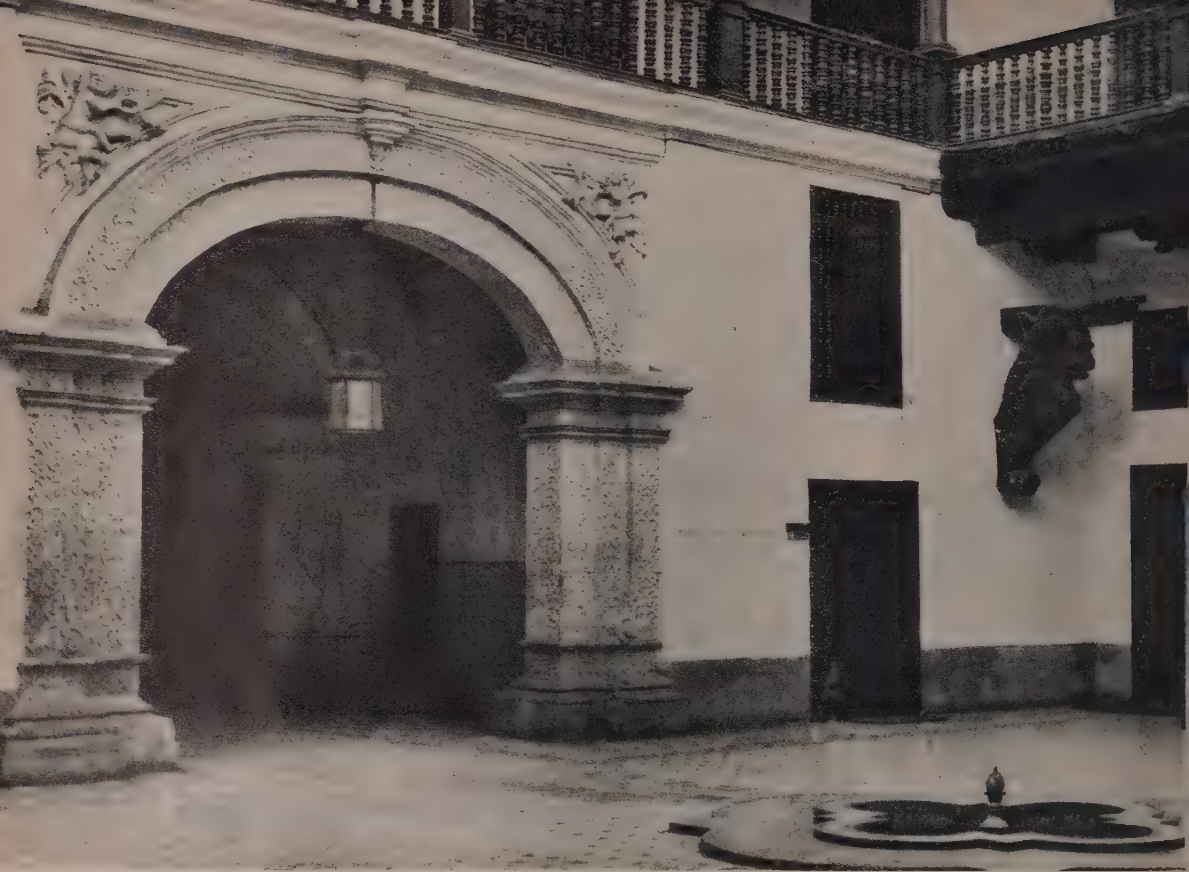
exemplary virtues, and of the saintly nun Santa Rosa, celestial patroness of the city which was her dwelling-place on earth. The cathedral, begun by Pizarro in 1535, was completed ninety years later, but was shaken down into a heap of ruins by the earthquake of 1746. Rebuilt in the following years, it stands today an imposing specimen of Spanish colonial architecture. In one of the richly decorated chapels of the interior the remains of Pizarro are preserved in a glass coffin. The cathedral and also some of the many other churches contain remarkable carved work both in wood and in stone. The northern side of the Plaza, at right angles to the cathedral and the archbishop's residence, is occupied by the government buildings of the Republic, formerly the palace of the viceroy. But it is in the other two sides of the Plaza de Armas that one might fancy oneself to be in a city of Old Spain. For these two sides are bordered by arcades, typically Spanish in character, projecting over the pavement, exactly like the *portales* of some ancient Spanish city, notably those which surround the central *plaza* of the city of Salamanca. Under these pleasant arcades one may stroll sheltered from the sun, examine the wares in the shops, watch the movement of the place and satisfy oneself that the traditional reputation of Lima for the beauty of its women, beauty of a Spanish or Andalusian type, is not belied by the Limeñas of today. Two things, however, remind the visitor that he is not in European Spain: an Indian soldier, a mountaineer from the Andes, stands sentry at the door of the Government building; and an African tinge in the complexion of some of the passers-by recalls the fact that in former days there flourished here a slave-owning aristocracy.

It might reasonably be thought that in this region only 12° south of the Line, a torrid equatorial heat would forbid any comparison with Spain. This is, however, the very opposite of the truth. Although the vertical sun naturally has much power, the air is always temperate. This whole coast is refreshed by a perennial southerly wind blowing from cool climates and also by the great Antarctic Ocean current sweeping northward past the Pacific shore. In Lima one may walk the streets in European clothing at midsummer, and at the

Model figure, two feet high, of 'La Tapada', the veiled lady of Lima. This is the veil of Moorish origin which prompted a Papal interdict in 1671. Despite the ecclesiastical ban, Peruvian women persist in wearing this provocative headgear for fêtes and costume parties. (Opposite) The Palace of Torre Tagle, a good example of Spanish colonial architecture in South America. It now houses the Peruvian Foreign Office







By courtesy of the Peruvian Information Bureau

(Above) Characteristic Lima patio. This is at the front of the house, there is also a patio at the back. From the lion's mouth scales used to hang in which tradesmen had to weigh their goods on delivery. (Opposite) Stairway up to one of the elaborately carved balconies in Torre Tagle

neighbouring seaside resorts one may dive into sea-water which is almost too cold. Indeed, the chief climatic drawback is not excessive heat, but the chilly sea fogs which hang over the city during the winter months and can sometimes hardly be distinguished from a 'Scotch mist' or fine drizzle, not sufficient, however, to penetrate the mud roofs of the older houses. A genuine shower is so rare a prodigy, happening after intervals of years, that this may fairly be called a rainless region. People who have means and leisure to spare sometimes migrate during the foggy season to the pleasant 'hill station' of Chosica, thirty miles distant and situated at a height of 2800 feet above the level of the coastal mists. There is, however, no escaping the earth tremors which are so frequent as to attract little attention, or the occasional earth-

quakes which compel attention.

The monotony of the uniform rectangular intersecting streets is redeemed by the dignity and convenience of a regular scheme of town-planning. The plan is slightly modified by the lie of the ground and by the course of the River Rimac, which skirts the city, dividing it from a modern suburb. Moreover, several other *plazas* or open squares give variety, space and light. One of these, the Plaza Bolívar, formerly known as the Plaza de la Inquisicion, contains the building which once housed the Inquisition, now used as a museum. Here, also, is the building of the University of San Marcos, founded in 1551, and still flourishing, its equipment and range of studies having been adapted and expanded to satisfy modern needs. Another flourishing survival from old Spanish days is the bull-



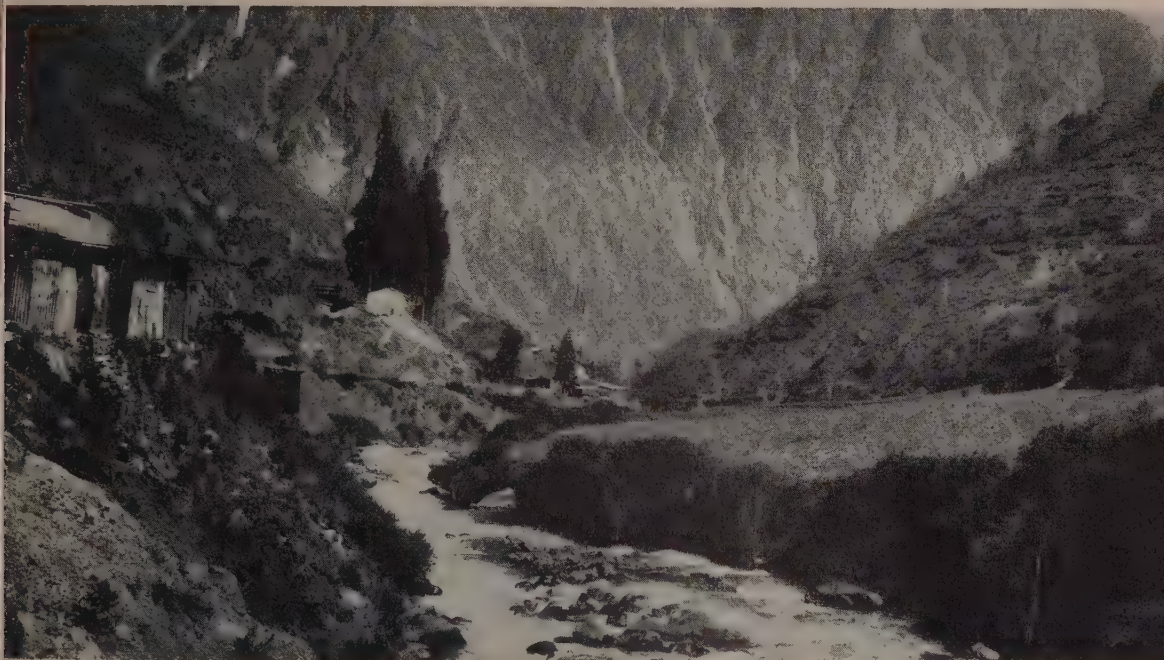


Dorien Leigh

(Above) In a village in the interior: one of the few remaining inhabited houses dating from the first days of Pizarro and the Spanish conquest. (Below) A highland station on Peru's central railway in the Andes—the highest in the world, rising to 16,000 feet



Black Star



Fox Photos

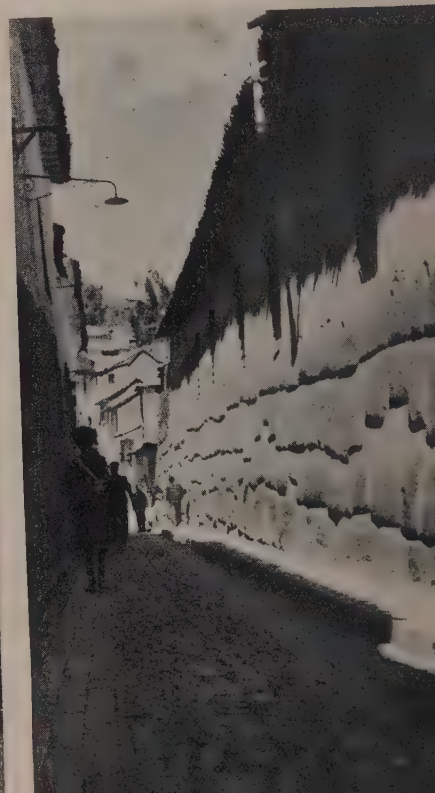
(Above) *The River Rimac which, rising in the Andes, flows through the city of Lima. It is famous for its prawns. (Below) Coca sellers of the interior at one of their Sunday markets. Their only measure is the palm of their hand*



Dorrien Leigh



By courtesy of the Peruvian Information Bureau



ring, situated beyond the river. Here on Sundays and holidays during the summer months 25,000 spectators may view the show and on occasion may witness the skill and prowess of some famous *matador* from the Peninsula. Equally characteristic though less conspicuous institutions tracing their history from Spanish days are the many convents of the city.

The older houses of Lima are constructed according to the semi-Moorish plan of Southern Spain: a single storey built round open *patios*, into which the rooms open. The projecting latticed windows or balconies overlooking the street, and much frequented by the women of the family, are an interesting feature of the place; a thoroughly Spanish traditional feature. Indeed, a notable monument of domestic life and customs is preserved in the elaborately carved balconies of the Torre Tagle palace, now the Ministry of Foreign Affairs, which was the home of one of the titled families surrounding the viceregal court. Modern buildings of reinforced concrete, constructed to withstand earthquakes, offer a complete contrast to the family dwellings of the older type.

The modern extensions and pleasant suburbs of the capital do not conform to the rigid symmetrical plan, and there is nothing rigid about the noble avenues, planted with trees and shrubs and adorned here and there with the sculptured monuments of national heroes. Most of these avenues are the several sections, bearing different names, of the broad boulevard which follows the line of the old fortifications, demolished half a century ago. But there are other shady avenues, much frequented in the evening, pleasant places for walk or drive, notably the Paseo Colón, 120 feet wide and three miles long, planted with four rows of palm trees. In addition to these pleasant places of popular resort, the grounds of the Exhibition Building provide a spacious public park. Within the Building may be viewed a comprehensive historical collection, including many specimens of Incaic and pre-

Incaic art. Here, also, are the portraits of the long line of Spanish viceroys, including the Irishman Ambrose O'Higgins, who rose to the highest rank in the Spanish service and died in office as Viceroy of Peru in 1801, having done much for the health and improvement of the capital.

A few miles from the city are the seaside resorts with the beautiful names of Chorrillos, Miraflores, which offer the recreations of bathing and boating and the changing scenery of a tidal shore. The whole of this varied prospect is best viewed from the summit of Mt. San Cristóbal, which rises to a height of over 1000 feet on the landward side of the city. From this eminence the city of Lima, set in its fertile plain, lies spread out like a map at your feet; beyond it the sea-coast and the ocean; on the other side the foothills of the Andes; and beyond these, dominating the whole scene, the towering height of the Western Cordillera.

A concluding paragraph is due to the modern high-roads which radiate from the capital. They are mostly of recent construction; for in Peru, as in South America generally, road-making was little regarded until the coming of the motor-car. But today Lima, as befits a capital, is a centre of communication to all parts of the Republic.

One of these roads runs from Lima northward to the Ecuadorian frontier and southward to the border of Chile, following generally the line of the coast and traversing the whole length of the Republic. Thus the Peruvian section is complete of the projected "Pan-American Highway" which is to link Washington with Buenos Aires at some future date. The present immediate value of the road lies in the fact that it brings the capital into contact with the whole coastal zone. Of the other highways, two are conspicuous. These two roads, rivalling the engineering marvels of the Central Railway, climb the lofty passes of the Western Cordillera and descend into the mountain plateau beyond. One of them, far outstripping the railway, surmounts also the Eastern Cordillera, descends into the *montaña*, the wooded region of the far interior, and reaches the margin of navigable rivers which flow into the Amazon. Thus this long highway brings the capital into communication with a part of the country hitherto only accessible by aeroplane or by the immense *détour* of the Atlantic and the Amazon. It cannot yet be told how far this great and costly endeavour to unify the country can bring about the desired economic results. In any case, it is in itself a remarkable achievement.

(Opposite, top left) *Principal square at Arequipa, the second city of Peru and centre of political and commercial life of southern Peru.* (Right) *Village of San Mateo in the Rimac valley.* (Bottom, left) *Old Spanish colonial house in Cuzco, ancient capital of the Incas.* (Right) *Inca stone walls in Cuzco to which second storeys were added by its Spanish conquerors*

Navigation

by LIEUTENANT-COMMANDER R. T. GOULD, R.N. (retired)

In November of last year, we published an article by Professor E. G. R. Taylor on the intrusion of mathematics into everyday life. In this article, Commander Gould goes a stage further and tells the story of the application of mathematics to problems of navigation

WHAT is Navigation? An excellent answer was given to that question long ago by John Davis, the famous English navigator who gave his name to Davis Strait, in the Arctic. He published his book *The Seaman's Secrets*, soon regarded as the standard English text-book of navigation, as long ago as 1594; and in it he states: "Navigation is that excellent Art which demonstrateth by infallible conclusion how a sufficient Ship may be conducted the shortest good way from place to place. . . ."

The navigator is expected to be able, at all times, to answer the question "Where do we go from here?" In other words, he must always know where he is, and what course he should steer for his destination. It sounds a fairly simple requirement; in fact it bristles with problems of all kinds—problems which have taken many centuries to answer, while some of them have not been completely solved even now.

In the pre-Viking days all navigation was probably coastal; the navigator hugged the shore as closely as he dared, and never went, if he could help it, out of sight of land.

For this there was a very excellent reason. Once the land had sunk below the horizon, he had no means of finding his vessel's position ; the sun and stars, if visible, were his only guides to the passage of time and the course he was steering, for he had no compass.

Despite this handicap, some very creditable voyages are on record. For instance, there seems no reason to doubt the truth of Herodotus's story that about 600 B.C. Necho, Pharaoh of Egypt, sent an expedition, manned by Phoenicians, which completely circumnavigated the African continent, descending the Red Sea, rounding the Cape, and returning via the Bight of Benin and the Pillars of Hercules (Gibraltar Strait). They spent three years on the job, landing each autumn to sow corn, and pushing on the following year after reaping their harvest. A little later (the exact date is not known) Hanno, the Carthaginian navigator, coasting Africa the other way round, explored a good deal of the Guinea coast.

To this day a good deal of coastal navigation, and even a certain amount of ocean



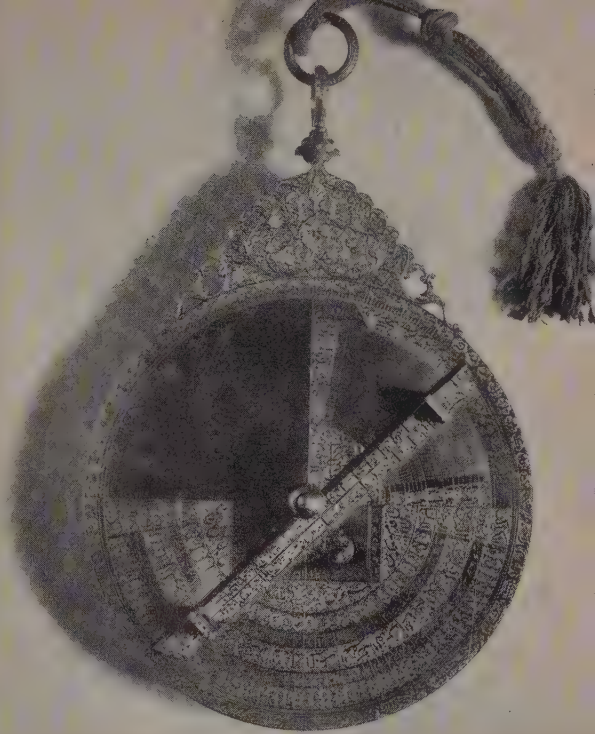
navigation, is done with practically no instrumental equipment. The fishermen of the North Sea and the Newfoundland Banks can do marvels in the way of sizing up their position accurately, when out of sight of land, with nothing but the hand-lead to guide them. Again, during the Napoleonic Wars an American vessel, having crossed the Atlantic, was seized and condemned at Oslo (Christiania), the authorities of the port holding that, as she had no chart or sextant on board, she must have come from the British Isles. The other American shipmasters at Oslo made an indignant protest, stating "we have frequently made voyages from America without the above articles, and we are fully persuaded that every seaman with common nautical knowledge can do the same". And in recent years, Captain Joshua Slocum of the U.S.A. took the *Spray*, single-handed, right round the world with the help of a tattered school-atlas and a one-dollar alarm-clock, which had "... lost its minute hand, but after I boiled her she told the hours, and that was near enough on a long stretch".

But such feats are not for the ordinary navigator. In general, the deep-sea navigator requires, and always has required—whether he could actually obtain it or not—a small outfit of instruments.

The navigator needs, first, a chart: a map specially adapted to marine use, which embraces his starting-point and his destination, and on which he can lay-off the course or courses which he must steer. He must also have some means of keeping his ship on her predetermined course, and some way of knowing what speed, at any time, she is making through the water. These two needs are met, respectively, by the compass and the 'log'—the latter not to be confused with the book, of the same name, in which the events of the voyage are recorded.

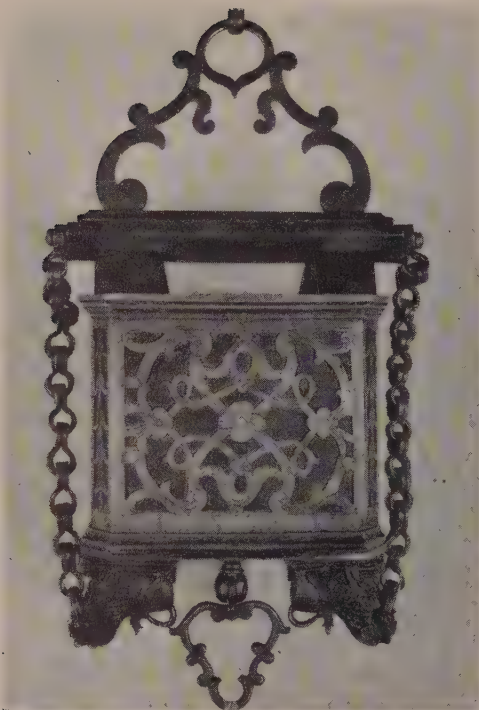
Furthermore, while his ship is anywhere near the coast he must frequently determine, by the hand-lead or some equivalent, the depth of water in which he is navigating; and he must occasionally check her position by taking bearings of recognizable points of land and plotting these 'fixes' on his chart.

Finally, when land is no longer in sight he must not trust to his 'dead-reckoning', assume, that is to say, that because he has steered due west (by compass) for 500 miles (by the log) that he is necessarily 500 miles due west from his starting point. By reason of tide, currents, bad steering and other sources of error, he may be quite a long way from where he thinks he is. Consequently he must determine his latitude and longitude, as often as he can, by observations of the heavenly bodies, particularly the sun; and



A late 17th-century astrolabe of Persian workmanship. It is not the simple form of astrolabe used on board ship, but an example of the much more complicated pattern employed, chiefly for stellar observations, by astronomers on shore





The loadstone (or lodestone), a natural magnet, was, until comparatively recent times, the only device whereby compass needles could be magnetized

for this he requires a sextant, logarithmic tables, a 'Nautical Almanac' and a chronometer. Such (excluding many minor accessories and that ever-present help of modern times, W/T—wireless telegraphy) is an outline of the main equipment which he has always needed.

The earliest deep-water navigators of whom any record exists, the Arab traders of the Indian Ocean, the Pacific islanders and the Vikings, had very little of all this. The Arabs seem to have had the compass as early as the 11th century A.D.; and it is worth noting that there is no real evidence that the Chinese knew of it before that time. For that matter, it was certainly known to European navigators in the 12th century.

The Pacific islanders, some of whom were accustomed, at the same epoch, to make ocean voyages of several hundred miles and upwards (the Maori must have covered more than this when they colonized New Zealand in the 14th century), probably had no compass, and relied largely on dead-reckoning, correcting this by a close study of the prevailing winds and currents, and the use of rough charts. Until a few years ago, the natives of the Marshall islands were still making charts of their traditional type—light palm-fibre frames, with curved strips of the same material arranged to show the trend of wind and current, and small shells tied on to indicate the positions of the various islands. They checked their latitude by taking star-observations in a primitive form of 'artificial horizon',



An example of the simple—and not highly efficient—telescopes used for all purposes in the 17th century. Made by Jacob Cunningham in 1661, it is covered with tooled leather

viewing the star, by reflection, through a hole in the side of a clay jar filled with water to a predetermined height.

The Vikings—properly, but not often, pronounced ‘Wick-ings’—seem to have depended solely upon dead-reckoning. Yet they ranged over most of the then known world—and further. They reached the Mediterranean, sailing up the Rhone and raiding the Moroccan coast; they colonized Greenland; they entered the White Sea; and at least one of their chiefs (Leif Eriksson in 1002) crossed from Greenland to Labrador, continuing southward to Newfoundland and (probably) Virginia.

But the history of modern navigation really begins early in the 15th century when Prince Henry of Portugal, ‘Henry the Navigator’, established, in the Belem Tower at Sagres, his famous observatory and nautical school. Here he trained the men who, year by year, made their way, as Hanno did a thousand years earlier, steadily further and further down the west coast of Africa until they had rounded the Cape and could shape a course for India.

Two navigators of this school, Bartholomew Diaz and Vasco da Gama, inaugurated what is now called The Age of ‘Great Discoveries’, Diaz rounding the Cape (for the first time since Necho’s expedition) in 1488, while da Gama, following in the same track ten years later, went as far as Calicut on the Malabar coast, incidentally spending more than three months out of sight of land and covering,



‘Tell-tale’ compass, designed to be hung from a deck-beam in a ship’s cabin. It dates from about 1790.



A pair of the elaborately finished globes of former days—portable compendia, in handy form, of geographical and astronomical knowledge

during the whole two years' voyage, some 24,000 nautical miles.

At the time, however, the work of the Portuguese navigators—Díaz, da Gama and their greater successor Fernão de Magalhães (Magellan) who took the *Vittoria* right round the world in 1519–22—was, of course, overshadowed by Columbus' crossing of the Atlantic, from Gomera to the Bahamas, in 1492, and his consequent discovery of the New World. What was his navigational equipment?

So far as is known, it comprised compass, astrolabe, cross-staff, table of the sun's declination, table of corrections to the altitude of the Pole-star, rudimentary charts and the hand-lead. This seems to have been more or less the navigator's standard outfit both in Columbus' time and for at least a century later, so I give here a few particulars of it.

The compass consisted of a single needle (magnetized by the loadstone) pivoting on a steel point, and usually carrying a paper rose. It was mounted in a bowl or box forming a stand. No means of taking bearings was provided.

The astrolabe was used—or intended—for taking altitudes of the heavenly bodies. Actually Columbus found it of no value except in the calmest weather. It consisted of a small circular brass plate at whose centre was pivoted a diametral bar carrying two 'pinnules', or sight-vanes, while the chamfered end of the bar moved over graduations cut in the rim of the plate. Three men were needed to take a sight with it: one held it suspended from a ring at the edge of the plate, another aligned the pinnules on to the body being observed, and a third read off the angle.

The cross-staff, also called 'balestilla', 'arbalest', etc., from its marked resemblance to a cross-bow, was a much better instrument. It was a squared wooden staff, about three feet long, on which slid a transverse bar, or 'transversal', at right angles to the staff and bisected by it. The staff was graduated to form a scale of tangents. With his eye at the end of the staff, the observer got one end of the transversal in line with the heavenly body, and the other with the horizon, reading the subtended angle off the scale.

Given moderate weather, the cross-staff could take altitudes with an accuracy of two degrees or so; but for accurate observations its design postulated the services of an observer who could look two ways at once. For solar work it was superseded, ultimately, by John Davis' 'backstaff', in which the observer turned his back on the sun and sighted his staff on the horizon, while getting

the shadow of a sight-vane, mounted on a radial arm, to fall on a horizontal line scratched on the foresight.

Declination and Pole-star tables: the sun's declination, applied to his meridian altitude, gives the co-latitude of the observer. Changing annually from $23\frac{1}{2}^{\circ}$ N. to $23\frac{1}{2}^{\circ}$ S., and back again, its amount is not absolutely invariable on the same day in two successive years—but the difference is slight, and changes sign periodically. The error involved in using the same tabular value for every year would be much less than those of Columbus' instruments.

Seamen were aware, even in those days, that the Pole-star does not coincide with the Pole of the heavens, but describes a small circle round it. But for this, the altitude of the Pole-star, at any time, would be the exact latitude of the observer. A table then in vogue, known as the 'Regiment of the Pole-star', gave the correction (in latitude) to be applied for given positions of two stars, known as the 'Guards', in the Little Bear as they revolved nightly around the Pole-star. Later, an instrument known as the 'nocturnal' was used; this gave, by inspection, the required correction and (roughly) the hour of the night.

In Columbus' time there was little difference, if any, between a chart and a map. Land-surveying was in its infancy, and very few points on the earth's surface had been 'fixed', with any real accuracy, as to latitude, let alone longitude. The outlines of the known coasts, as mapped, were largely fanciful; and based, at best, on the work of navigators who could not determine their own position within hundreds of miles. Moreover, such maps were hopelessly unsuited to sea use, being generally on a plane projection, *i.e.* with the meridians (and also the graduations for latitude) all equidistant and parallel. For laying-off courses, and measuring distances, such charts were of much less value than a globe would have been—but a globe of adequate size would have proved a very unwelcome companion on ship-board.

The foundation of the modern chart was laid by the Danish geographer Nicholas Kauffman (*Lat. Mercator*) in 1569, when he published his map of the world on the projection which has ever since borne his name. Hitherto it had been difficult, almost impossible, for the navigator to draw or measure, even on a globe, the 'rhumb-line' joining his position with his destination. Such a line is the curve traced on a globe by a ship steering a constant course, and it cuts all the meridians at the same angle. To draw it on a globe (or on any consistent projection) once given the

angle in question, is easy; but the converse problem, to determine the path of the curve, and the angle it makes with the meridians (which is the course to be steered), given the initial and final positions only, proved much too hard a nut for the 17th-century navigator to crack. Hence the importance of Mercator's discovery that by making his meridians equidistant and parallel, and progressively enlarging the distances between his parallels of latitude as they receded from the Equator, he evolved a chart on which all rhumb-lines were straight lines, and so could be drawn with no trouble at all.

Two defects remain to be noticed in Columbus' equipment. He had no instrument for measuring his ship's speed. Actually he used the primitive 'Dutchman's log', a chip of wood thrown overboard from the bows and watched as it drifted astern. The late 16th century saw the advent of the hand-log, a small float designed to remain at the spot where it was thrown overboard, with a line attached which was gradually drawn overside as the ship proceeded. The line bore knots at equal intervals, bearing the same proportion to a nautical mile that the period of a small sand-glass (started when the float was put over) did to an hour. When the glass had run its time, the line was held—and the number of knots out at once indicated, without any calculation, the ship's speed. Hence the term 'knot', which is a measure of speed, not distance; it signifies a speed of one nautical mile per hour. Far too many people still speak of a ship as steaming "twenty knots per hour", which is nonsense; it should be "twenty knots", *tout court*.

Secondly, Columbus had no means of finding his longitude once he was out of sight of land. All he had to go by was his dead-reckoning—which was much the same thing as guess-work. Hence he went to his grave firmly persuaded that his New World was some outlying part of Asia: that the Pacific Ocean, in other words, did not exist.

The fact that the earth rotates from west to east prevents a navigator, on the high seas, from finding both his latitude and his longitude by astronomical observations. Those observations can only give him his latitude, and his local time; the time corresponding to the (unknown) meridian he happens to be on. To determine his longitude, he must know both his local time and the time of some standard meridian such as Greenwich. The difference of the two times, converted into angular measurement at the rate of fifteen degrees to one hour, will be his longitude.

It sounds simple, but putting it into practice baffled the best brains of the civilized world

until the 18th century was more than half over, and this in spite of the fact that in 1714 the British Government had offered a reward of £20,000 for any method of finding a ship's longitude within thirty miles at the end of a six weeks' voyage. That was taken as the normal duration of a trans-Atlantic voyage; in which, by trusting to dead-reckoning, a ship might easily be off Dungeness when she thought she was south of the Scillies, and vice versa.

A first step, though not a very long one, in the right direction was taken in 1731 when Hadley, an Englishman, and Godfrey, an American, independently invented the sextant—the instrument, *par excellence*, for measuring angles at sea. In this the observer looks through a small telescope into a mirror occupying half the field of view. A radial bar, carrying a second small mirror, traverses a graduated arc, and by moving the bar any two objects—say, the sun and the horizon—can be brought into coincidence, one being seen by double reflection and the other direct. The angle described by the bar on the arc is exactly half that subtended between the objects. In consequence, 30° of arc are graduated as 60°, and so on.

Where the sextant scores so heavily for sea use is that, owing to the double reflection, once the objects have been brought into coincidence (or, more usually, into contact) they stay so, unaffected by any motion of the ship. For the first time, it became possible to make really accurate observations at sea. The modern sextant is graduated to every ten seconds (1/32400 of a right angle).

As already explained, such observations, however accurate, would only give, in themselves, local time—not longitude. To get that, the navigator must know Greenwich time as well; consequently he must either find this from some other kind of observations, or carry it with him.

It can be done, by what are called 'lunar distances', observations of the moon's position relative to other bodies; and from about 1770 onwards (we did not know enough about the moon's motion before that) it sometimes was. But the method was never very satisfactory, and has long been obsolete.

The other plan, of carrying a timekeeper on board showing Greenwich time, was sound, in theory, when first proposed (by Rainer Vandensteen, of Friesland: *Lat. Gemma Frisius*) in 1530; the trouble was that for more than two centuries nobody could put it into practice. For example, the terms governing the British Government's reward of £20,000 laid down, in effect, that the timekeeper must not vary, on the average, more



(Left) Sundial, adjustable for all latitudes, enabling apparent solar time to be found in any part of the world.

(Right) Harrison's Number One marine timekeeper, the first accurate one ever made. Weight 72 lb., completed in 1735 and successfully tried at sea 1736. The dials show seconds, minutes, hours, and days (below it is a footrule to give scale). The photograph was taken by the author after he had cleaned the instrument, but before it was reconstructed so that it would 'go'. All the early nautical instruments shown in these illustrations are now in the National Maritime Museum at Greenwich

Photographs by kind permission of the Trustees of the National Maritime Museum, Greenwich

than three seconds in a day. But in 1714, when that reward was first offered, there was no clock on shore which, with the help of a pendulum and a steady base, neither of which could be provided for sea use, would keep time with such a degree of accuracy.

Newton, and his great rival Leibniz, concurred in thinking that the thing would never be done; and various practical clock-makers, such as Sully and Dutertre, who had spent years in making elaborate and costly machines of the kind which proved, at sea, to be total failures, entirely agreed with them. Then, when the 'discovery of the Longitude' had passed into everyday speech as the perfect specimen of a hopelessly insoluble problem, this was solved by an unknown, patient, hard-working Englishman—John Harrison.

Harrison (1693–1776) was a Yorkshire carpenter who taught himself clockmaking and produced, by 1726, a pendulum clock of his own design which he could trust to within a second a month. He set about adapting this for use at sea, replacing the pendulum by two large balances geared together, compensating his balance-springs for temperature, and mounting all the moving parts on anti-friction wheels. His No. 1 machine of this

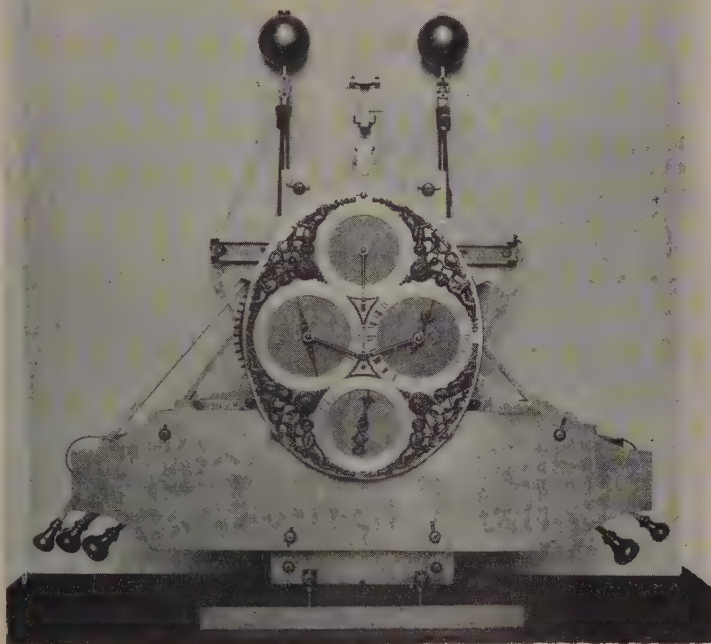
type, a marine clock weighing about 72 lb., was officially tested (1736) in a voyage from London to Lisbon and back, and showed itself capable of 'keeping the longitude' within a few miles. It was, of course, far too bulky and complicated for ordinary knockabout use at sea, but at least it showed that the longitude problem was in a fair way to being solved.

Between 1738 and 1757 Harrison built two more large marine clocks embodying various improvements (neither was tried at sea), and then in 1759 he produced his famous No. 4 timekeeper which won him the £20,000 reward. In this he succeeded in reducing his mechanism to about the size of a modern chronometer; No. 4 is, in effect, a large silver watch about five inches in diameter. Mechanically, it consists of two watches; a very small and accurate watch (with a running-time of ten seconds only) which does the timekeeping, and a second watch which automatically re-winds the first every $7\frac{1}{2}$ seconds. Two official trials in 1761 and 1764 showed that it could keep time at sea with an accuracy far greater than the standard called for by the conditions governing the £20,000 reward: and, after a lot of official procrastina-

tion, the final instalment was paid to Harrison in 1773.

The Harrison time-keeper is not the chronometer of today. It was superseded almost immediately by the much simpler mechanism evolved independently by two English watch-makers, John Arnold and Thomas Earnshaw, about 1780 and still used, almost unaltered, today. None the less, Harrison stands alone as the first man to show that an accurate marine timekeeper could be made, and the merits of his wonderful machine were fully demonstrated, in his own time, by the greatest of all navigators, Captain James Cook. In the second and third of his voyages round the world, Cook carried, and swore by, an exact part-for-part copy of No. 4 made by Larcum Kendall, and its recorded going, in all conditions of service, was splendidly accurate. For example, during his second voyage Cook discovered Hervey Island while sailing westward, and determined by the timekeeper that its longitude, based on that of Tahiti, was $158^{\circ} 54' W$. In his third voyage, sailing eastward, the same timekeeper gave the island's longitude, based on that of Queen Charlotte's Sound, as $159^{\circ} 04' W$; a difference, in that latitude, of nine nautical miles. The accepted longitude, nowadays, is $158^{\circ} 56\frac{1}{2}' W$.

It is fitting that Cook should have been the first navigator to have the use of an accurate chronometer, since he forms a connecting link between the 'Age of Great Discoveries' and our own. He was at once the last of the great early navigators and the first of the modern scientific explorers. Starting life as a grocer's boy, painfully educating himself for his life-work while serving in the Navy as a warrant-officer, he extended the outline of the known world as widely as ever did Columbus or Magellan; while he mapped his discoveries so accurately that, with slight modifications in detail, his charts of them might be used now. In their combined extent and accuracy, they have never been rivalled



Lt.-Commander R. T. Gould, R.N. (ret'd.)

and never will be: for, except in the Polar regions, Cook left the map of the world, in outline, substantially as we know it today.

Yet the work of the navigator is never finished and his equipment is changing more rapidly in our own day than in bygone times. Fifty years ago, for example, one would have said that if there were any three navigational instruments which, so far as we could see, would always be indispensable, they were the magnetic compass, the chronometer and the sounding-lead. Yet all three are on the very verge of being completely superseded by more efficient devices. The magnetic compass, sorely harassed by the many disturbing influences of an iron hull, is rapidly giving place to the gyro-compass; W/T has relegated the chronometer to a position of quite secondary importance; and sounding, both in deep and in shallow water, can be performed both more quickly and more accurately by the echo-sounding apparatus.

Such is the sweeping effect of just three of the many modern developments which, in sum, have rendered modern navigation "an art and a mystery" not only to landmen, but even to retired navigators of only fifty years ago.

A Post-War Farm in Kenya

by PETER HILL



Six months ago I bought 300 acres of land in Kenya. It is undeveloped at present, but my wife and I intend to return and farm it after the war.

The land is in the district of Sotik, some eighty miles to the south-east of Kisumu on Lake Victoria. The nearest town is Kericho, forty miles away in the centre of the tea-growing district. Sotik is one of the most remote districts in Kenya to be settled by Europeans, but its fertile land, gently undulating, and well watered by the Kipsonoi River, amply compensates for its isolation.

The Highlands of Kenya cover an area of about 35,000 square miles, between the Indian Ocean and Lake Victoria. Although the Equator passes through this area it enjoys a temperate climate owing to its height. Most Europeans live at altitudes varying between 5000 and 9000 feet, where the weather is much like that of a good English summer, but getting colder and wetter as one goes higher. At the higher altitudes they get frosts at night.

Our land lies on a hillside, at about 6000 feet, sloping into a flat valley. Across the

lowest corner runs a small stream bordered by swampy ground. Further up are several young plantations of gum and wattle trees (one of the disadvantages of the area is the scarcity of indigenous timber) and two springs. We shall have to plant more timber in order to have a regular supply of firewood and fencing posts, and we hope, by clearing out the springs, to provide a sufficient supply of water for our house and cattle without having to resort to the stream, which is not so clean and is further away from the site of the house.

The hillside consists of turf and low bush, which will have to be cleared. Where the land is too steep, or the soil too shallow, for arable, it will make good pasture for cattle. Above our top boundary the hillside rises another five hundred feet and includes the land of our nearest neighbours. Although we shall be living many miles from a town, several neighbours are within easy distance. Three share our boundaries and have homes within a mile of ours; and there should be at least a dozen families within five miles. Neighbours are an important consideration

(Left) Seven span of oxen drawing a disc harrow on land bordering the author's three hundred acres—which lie in the district of Sotik on a hillside some 6000 feet above sea level. (Right) A neighbour's crop of passion fruit, planted in rows, with pyrethrum, from which insecticides are made, between them



Photographs by the author

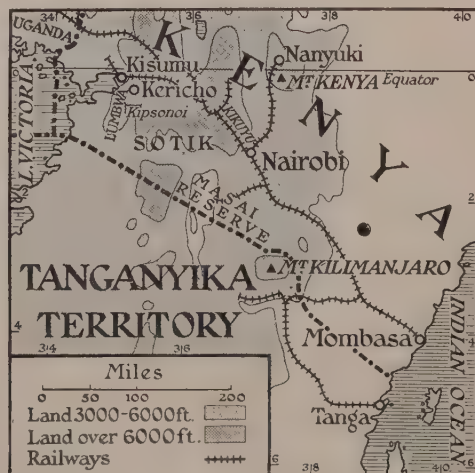
when looking for land to settle, and were one of the primary factors which made us decide on this particular spot.

Before we left Kenya we spent a few days in Sotik, making arrangements for work to be done in our absence. A neighbour who has undertaken to supervise it already had a labour gang clearing some of the ground. Most of them were of the local Lumbwa tribe, but the foreman, or 'headboy', was a Kikuyu, the largest tribe in the country. He spoke some English, could read and write, and kept a written record of the hours worked.

The tribes have each, of course, their own language, but at school they are generally taught Swahili, the coastal tongue which has become the official language of East Africa. Government officials speak Swahili fluently and grammatically, but the average European talks to his African employees in a less grammatical dialect usually called 'Settler Swahili', which is easy to learn.

We liked the African native, and found him a jolly fellow, with a nice sense of humour. He does not work very hard and needs supervision, but the training in the army that so

many have now had, with the better food and standard of living that will be their post-war due, should produce a marked improvement in their ability and efficiency. Huts, as labour lines, have already been erected on



Stanford, London



our land for the boys- now working there. By giving each boy a decent home surrounded by a piece of land on which his family can grow maize and vegetables; and by interesting ourselves in their general welfare, we hope to retain a permanent labour force. We are also fortunate in being situated between two native reserves which should ensure freedom from labour problems. We had a great respect for the Kikuyu boy who looked after our house and cooked for us near Nairobi. He was good at his job and impressed us by the way he slept across the front door, club in hand, when we came home late at night! We have arranged that he, with his wife, shall come and work for us when we return to Kenya.

We chose a site for a house, had an acre of land cleared, and arranged for the planting of ornamental and fruit trees. A rough fence was planted round them to keep out stray animals. From our house we shall have a view across the valley to the well-timbered knoll on which a neighbour's house is built, and thence across miles of Africa. Nearby the Masai native reserve abounds in big game, including elephant, rhinoceros, lion and leopard. But now that the alienated area is becoming more closely settled, very little trouble from the game is experienced on farms.

We shall build our house from stone quarried off our own land. A native mason is to start cutting stone this year, and the



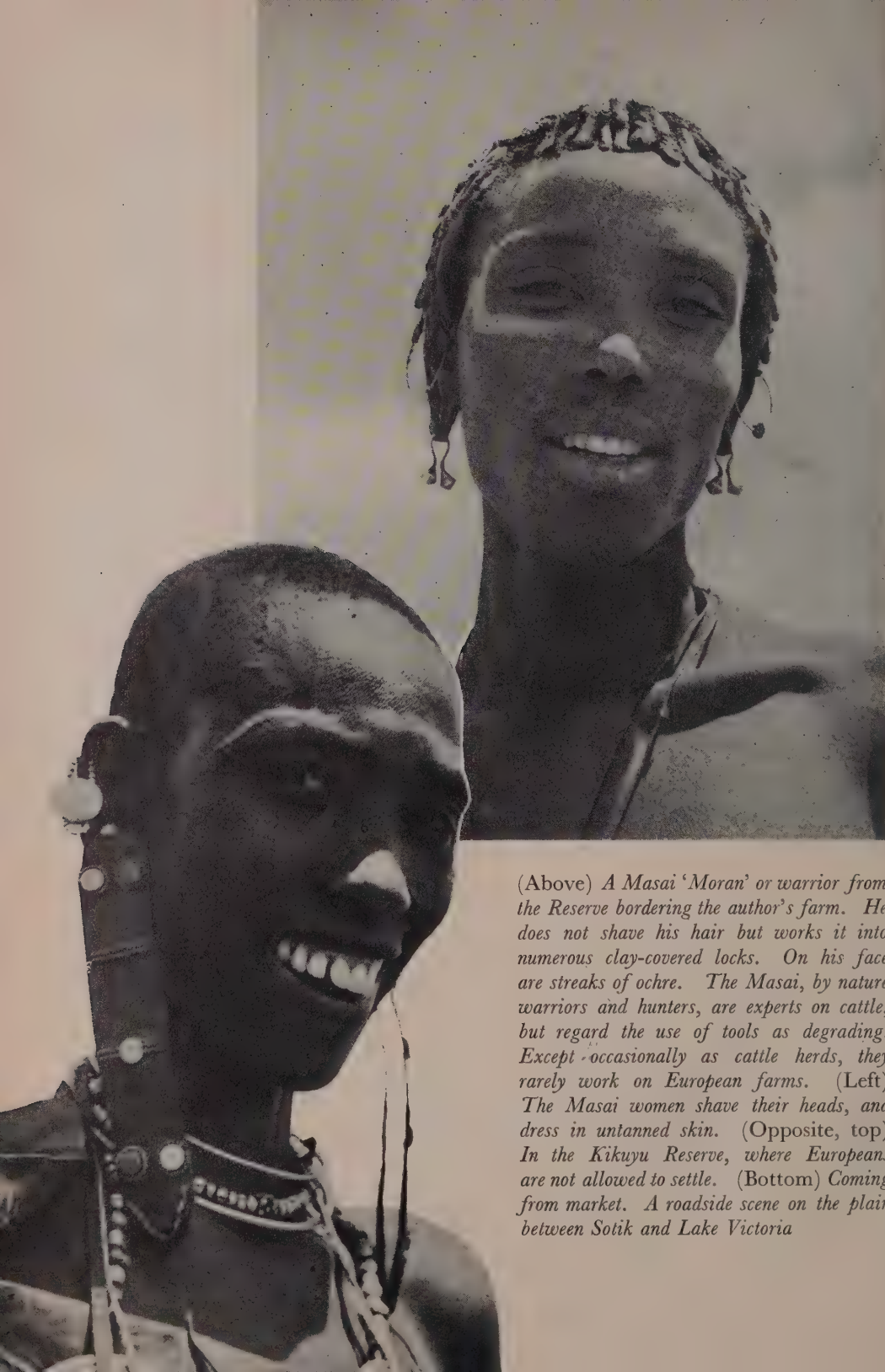
(Opposite) A road bordered with sisal plants on the plains near the author's farm. String and rope are made from the leaves of the sisal. (Above) Settlers' home in Sotik, made of stone, timber and thatch off their own land. Inside are a large living-room, and four smaller rooms for sleeping and perhaps working in, a kitchen and a bathroom

timber too will be cut locally so that it will be seasoned on our return. The roof will be thatched from local reeds. Some houses in the district are built of wood, but this is probably more expensive than stone or brick as there is so little good timber available. Bricks are usually baked by the settlers themselves. In design the building will be a simple bungalow, consisting of a large combined dining and sitting room, two or three bedrooms, a workroom for sewing and photography, bathroom and kitchen.

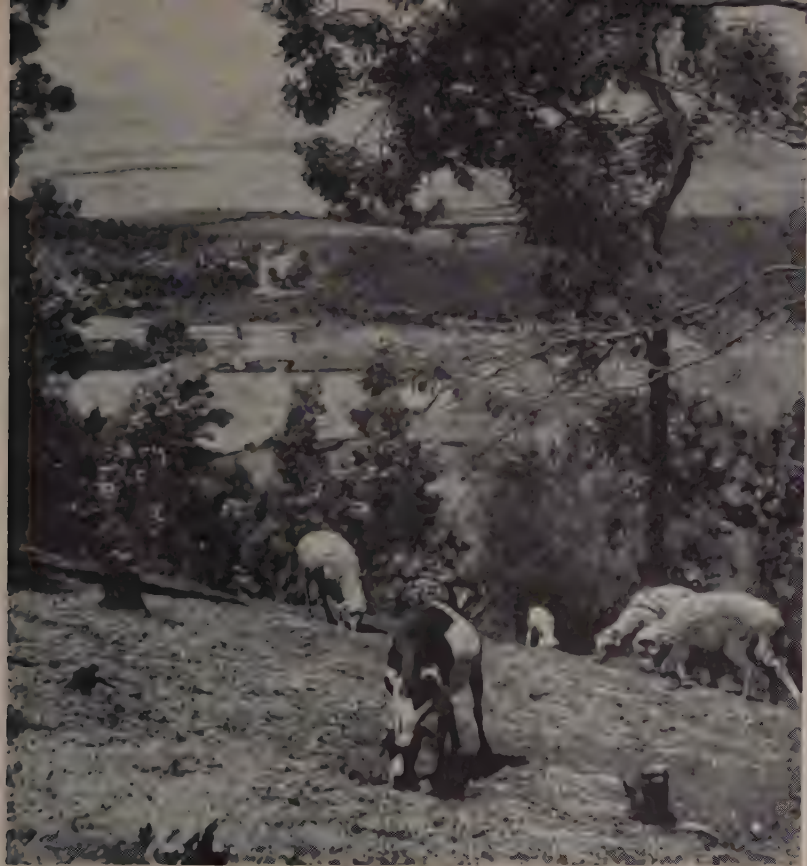
In thatching the roof we are considering the aesthetic effect more than the utilitarian. In the latter case we should have used corrugated iron, which is popular because it catches rain water. But we hope that our

springs will suffice. We shall have to arrange some means of pumping up the water, the most common in use being the 'ram', which utilizes the fall of the water to pump up a proportion of its output. If the springs are inadequate we shall have to roof outhouses with corrugated iron and supplement the water supply from them.

Sotik has a well-distributed rainfall, averaging sixty inches a year. While we were stationed in Kenya there was a serious drought which turned attention to the districts which had not suffered. Sotik was one of these. Its immunity was due more to the distribution of the rain throughout the year than to the amount. There are two rainy seasons in Kenya—the Long Rains from



(Above) A Masai 'Moran' or warrior from the Reserve bordering the author's farm. He does not shave his hair but works it into numerous clay-covered locks. On his face are streaks of ochre. The Masai, by nature warriors and hunters, are experts on cattle, but regard the use of tools as degrading. Except occasionally as cattle herds, they rarely work on European farms. (Left) The Masai women shave their heads, and dress in untanned skin. (Opposite, top) In the Kikuyu Reserve, where Europeans are not allowed to settle. (Bottom) Coming from market. A roadside scene on the plain between Sotik and Lake Victoria



March to July, and the Short Rains in November and December. In many parts very little falls between these periods, while in areas near Lake Victoria, such as Sotik, a considerable proportion of the annual rainfall occurs between the rainy seasons. A sixty-inch rainfall well distributed may suggest that there are few fine days. This is not so, for the rain is heavier than in the British Isles and usually does not occur until the late afternoon and the greater part of the day is sunny.

At first our house will have to be lighted by candles and kerosene lamps, but we have hopes of an electrical system, if we can derive sufficient power from our stream by creating an artificial fall—and if we can derive sufficient cash from the farm.

It is a great saving in money and time in the sort of life we hope to lead if one can do plumbing, electrical and carpentry jobs about the house and farm oneself. I doubt, too, whether we shall have the luxury of an architect. The building labour will be mostly African, with probably Indians on the more skilled jobs, and one, or both of us, as supervisors, and neighbours as advisers. Some attractive houses have been built in this way, where the design is primarily functional. Usually a small building of one room is put up as quickly as possible. The new settler lives in this one-roomed dwelling while the main house is erected nearby. He can then watch the development of his farm and the erection of his home; or the small building—often just mud and wattle—can later be turned into a guesthouse or store.

On our farm of 300 acres—very small compared with most Kenya farms—we plan to make dairying our main 'line', followed by pigs, possibly sheep, a few poultry, and some crops such as passion fruit, soya beans, and pyrethrum of which insecticides are made. In Kenya the risk of drought, hail and locusts is as great as anywhere in the world, but can probably be kept to a minimum by following a policy of mixed farming, and by keeping accurate accounting records and trying to ensure that out of profits in good years reserves are made for bad years.

As soon as possible after the end of the war I, and possibly my wife, intend to have some sort of agricultural training, and I hope to go through a short course for new settlers which may be arranged by a Kenya agricultural college, and then to spend two or three months as pupil to a sound dairy farmer.

We look forward to our life as farmers in

Kenya, particularly to rising early each morning and making an inspection of our farm on horseback before breakfast, when the air is cool with a nip in it, while the sun slowly clears the mist that lies in the valleys. After a bath and breakfast we shall each turn to our respective duties. Mine will vary according to the time of year, state of the crops, needs of the stock. Much of my work will be administrative, but it will also entail showing the boys how to do their jobs properly, manual assistance, odd maintenance jobs about the buildings and farm machinery, book-keeping and correspondence, and visits to neighbours for help and advice.

My wife will have her hands full with the domestic side of the house, the dairy and the garden.

The usual indoor staff consists of a cook and a houseboy, and is increased as the family grows larger. In a life where she cannot ring the local stores for everything she wants, a housewife has to think ahead and improvise more than we normally do at home. In Sotik township we have one local store and a post-office, ten miles from our farm. The greater amount of household requirements are obtained from Kericho, which means ordering by letter. A carrier comes out by road three times a week. We hope to become almost self-supporting for food: meat, milk, butter, eggs and poultry from our farm; vegetables and fruit from the garden. The climate has the advantage of allowing us to grow vegetables all the year round.

In the dairy my wife will make butter for our own use, and the cream will be sent by road carrier to the railway, seventy miles distant, and thence to a cooperative creamery. The latter makes it into butter and sells it locally or exports it, a monthly cheque being sent to the farmers.

Our garden will grow all the vegetables to which we are accustomed at home; marrows, cucumbers and tomatoes in the open. Fruits will be more tropical, for we need to be a thousand feet higher to have success with deciduous fruits such as apples, pears and plums. We shall therefore concentrate mostly on oranges, lemons, grapefruit, pineapple, paw-paw, mango, custard apple, guava and passion fruit. Strawberries and mulberries also do well.

People like ourselves should have an easy time compared with the earlier settlers, whose only means of transport was a bullock wagon. But we quite realize that any success we may achieve will be largely due to their pioneering efforts.

Segensonntag in the Lötschental

by E. A. ELDERS



FOR fifty-one Sundays of the year, the five hundred farmers of the Lötschental might almost be living in 16th-century Helvetia. Cut off from the outer world by mighty mountain ranges, they still do things as their great-grandfathers did them; they retain their cantonal costume and their ancient customs. But the Sunday after Corpus Christi—*Segensonntag*—is set apart as the Lötschental's day of days. From all parts of the country come pilgrims to watch, or take part in the valley's annual church parade.

On the train which carried me the hundred-odd miles from Lucerne to Goppenstein one June morning in 1938, were 1100 passengers, every one of whom had risen before 4 A.M. to make the journey. There were at least half a dozen such trains from other centres, and that day the valley held three or four times its normal population.

It was 8.30 A.M. and a cold wet morning for midsummer when I donned an oilskin climbing cape and walked along the platform at Goppenstein station to the buffet, which

was doing a roaring trade in strong black coffee and ham sandwiches.

Then began the strangest pilgrimage I have seen: several hundred people from every walk of life, stumbling up a rock-strewn, mud-coated track—out of the 20th century of motor-cars and railroads into a fragment of 16th-century Switzerland.

As we crossed the railway line and started up the narrow track signposted "*Nach Lötschental—Ferden, Kippel*" I saw three girls in smart black dresses and Paris model hats. Almost treading on their heels came a sturdy old fellow of 80-odd years, supported by a son on either side, all clad in the sober black coats and drainpipe trousers of Swiss Sundays.

German tourists, men and women alike wearing shorts or 'plus-four' trousers and nailed boots, rubbed shoulders with black-habited nuns, and girls in the traditional costume of the Bernese Oberland. Two Swiss Army officers in grey-green uniforms, with glistening field boots (they did not glisten long on that muddy road), walked side by side in the straggling procession with a family party "out for the day".

Barely had we started the climb up the narrow gorge through which the river Lonza comes tumbling than there was evidence of the nearness of the mountains, hidden above in the rainclouds. The narrow path had been cut through the remains of a spring avalanche which covered the hillside, to a depth of six or seven feet, with hard frozen snow.

Stumbling on through the thick slimy mud, pilgrims summoned piety enough to remove their caps or do a reverence to the little painted saint who looked down on the strange procession from a niche in the overhanging rock. A clanking bell from behind cleared the way temporarily for the only form of transport the Lötschental knows—a curious sort of sledge on wheels, drawn by a mule, which crashed and bumped from boulder to



Swiss Federal Railways

boulder on its way up the valley.

On we climbed, under pinewoods where doves were crooning, by sloping meadows where the black-and-white goats were grazing to a tinkle of bells; and so to Ferden, first

village of the Lötschental. A battered wooden crucifix wedged between two huge boulders leans in benediction over the road; and a huddle of chalets built out of huge logs straggles down the hillside.

Opposite: Women in the traditional dress of the Lötschental kneeling in prayer at a shrine by the tumbling river Lanza, near Ferden. The shrine commemorates victims of one of the spring avalanches which are so frequent in this Swiss valley. (Below) Peasant girls of the Lötschental in their everyday clothes and black scoop bonnets





Schneiter

(Left) The village square at Kippel, capital of the Tal, on a festival day, when the villagers form a choir to entertain friends and visitors. (Below) Last in the Segenssonntag procession come the men of the valley in the uniforms worn by their forefathers who were part of Napoleon's Grand Army



Kettel

A Swiss companion talked of the Tal and its people. "They live still in the past," he said, "about five hundred farmers scattered over sixteen miles of rocky valley who will not alter their ways. They still use their old hand ploughs in the little fields. They store their scanty hay in little black stone huts they call *mazots* on the hillside. They are a

German-speaking community in a French-speaking canton. They are Roman Catholics while the people in neighbouring valleys are Protestants. Every hamlet has its communal oven where the bread of the village is baked. Ferden here has in its farms cheeses more than a hundred years old!"

Old Switzerland, he said, had lingered here

(Right) *The little church of Kippel, in which the Segensonntag celebrations have their centre. Beyond, is the wooded Hohgleifen where the last of the Lammergeier—bearded vultures—had its eyrie. (Below) Outside the church, the ‘Army’ lines the route for the procession to pass along*



Lauri



Schneider

longer than anywhere else. “Why, the last of the *Lammergeier*—the bearded vultures of the Alps—had its eyrie up on the Hohgleifen above Kippel for thirty years,” he said. “They called her the Old Woman. Her mate was shot because the villagers swore he was addicted to baby-snatching—though I never heard of an actual case; but she seemed to

confine herself to raids on the cats of the valley and lived on until sometime in the ‘eighties of last century when she was found dead beside a poisoned fox on which she had been feeding.”

As the road swung north-east round a rocky wall, the clouds lifted and the sun flashed out to light up the jagged snow-shrouded peaks of

the Bietschhorn rising 13,000 feet over the valley with the dazzling ice-fields of the Lötschenlucke at its head, the dark pines on the lower slopes and the white foaming torrent of the Lonza threading the patchwork of meadow at the bottom.

And so, the sunshine after the storm growing brighter every minute, we came to Kippel, 'capital' of the Tal, its hundred or more chalets of rough-hewn logs straggling in a maze of narrow unpaved alleys round the white-painted parish church with its tower and tall spire. Some of the chalets are so roughly constructed—great baulks of timber protruding from the ends of the gables as though there had not been time to square them off—that they have the appearance of stacks in a timber-yard. Most of them have living-rooms up a rude stairway, with cattle byres below. The cattle were indoors today, their collars and bells hung outside the byres, for the herdsmen were at church for the annual festival.

Beautifully carved on the exterior of one house in the Tal I saw these words: "In the year when one counted 1703, then did God stand by us. Then did the avalanche from the Bach gorge go past the house on either side." On another—a mountain hut—was the inscription: "In the year 1814; May God bless men and cattle in this hut against all dangerous storms." And it is not only a thing of the past, this habit of proclaiming faith in the Eternal. The newest house in the village has an even more elaborately carved pious inscription on its façade.

Pilgrims from Goppenstein soon filled the hamlet to overflowing; they clustered on the balconies of the houses, and knelt by the painted crucifix at the corner of the street. We wandered past the last house where the road up the valley peters out into a track worn through knee-high grasses and flowers, and gazed up the most unspoiled valley in the Oberland, possibly in all Switzerland. Only for the three miles from Goppenstein to Kippel could a car traverse the valley; and I believe I am right in saying there is no motor road to Goppenstein, only the railway track, so that modern transport and the tourist flood which it bears with it leaves the Lötschental undisturbed.

But now the single bell of the little church was clanging monotonously to signal the end of morning service; and through the crowded streets slowly filed the Segensonntag procession. First came men carrying two lanterns on tall poles; then two men in the military uniforms of a century ago—red coats with white cross-belts, white trousers and bear-

skin hats—with fixed bayonets glinting in the sun.

Small boys swinging censers preceded the Host, carried by gorgeously robed priests under a glittering canopy. Then two more lantern-bearers and two more soldiers.

Then up the narrow way came the boys of the valley, bareheaded and with scrubbed, preternaturally solemn faces, some of them telling their beads; and after them, headed by a crepe-shrouded crucifix, came their fathers—rough, bearded men, cattle-breeders with the clay of the fields thick on their boots, wearing snowy surplices over their working clothes and fingering holy medallions on ribbons round their necks. One or two carried small sons in their arms.

Next in the procession were the girls, some of them wearing clean white pinafores over dresses of a gaudy tartan that the Scottish Highlands would not recognize, but others, like their mothers walking behind them, wearing the traditional costume of the Lötschental—long black dresses covered with black lace, brightly coloured aprons and black 'scoop' bonnets of Salvation Army pattern, hung about with gold and silver ornaments and lace.

After them trudged the children carrying the Passion emblems—harp, crown of thorns, scourge and spear—on velvet cushions; and then, toiling up the narrow street between the overhanging chalets, the village band, playing a slow marching tune on battered brass instruments.

Then, behind patched and faded banners which dipped low in salute as they passed the wayside crucifix, came marching the ghost of Bonaparte's Grand Army—some fifty men of the Lötschental in the uniforms which their forefathers brought back from the wars of a century ago or which were left behind in this remote Alpine valley by stragglers from the armies which marched and counter-marched among the Swiss mountains. Brass helmets with sweeping plumes, shakos and bearskins nodded over red coats with the white cross-belts, the bright swords and the polished muskets as the 'regiment' passed on through the village and out into the flower-filled fields beyond.

Thin red lines they formed by the path through the meadows above the noisy river. Then, as the draped crucifix and the banners came through on their way back to church, there was a sharp word of command, and fifty muskets shattered the stillness in a crashing salute which roused the echoes on the crags of the Bietschhorn . . . Segensonntag in the Lötschental.



Photographs from Kosmos Press Bureau

In the ancient Monastery of Aiguebelle in Provence—



—the monks live under the severe rules of the Cistercian Order—



—in surroundings of the barest simplicity



For some of them their daily work lies in the distillery—



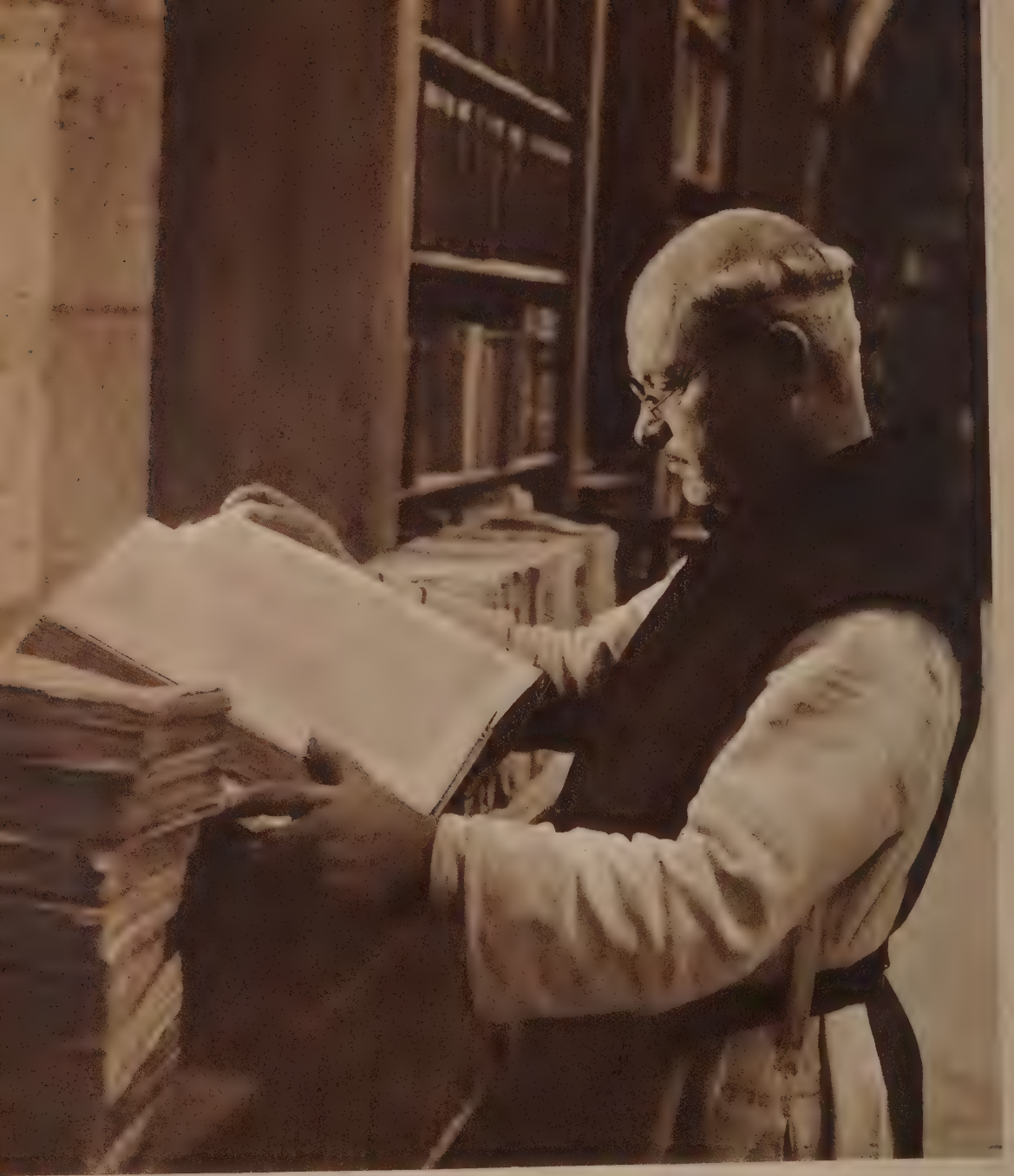
—from which the highly prized liqueur they prepare goes to huge cellar vats



When the chemist-monk has approved the glowing colour—



—'Aiguebelle' in its famous bottles is ready for disposal—



and the monks are enabled to continue their life of study and prayer

Our Allies in the Jungle

Impressions of a War Artist

by ANTHONY GROSS

The author has recently returned from a tour in the Far East where, as an official War Office artist, he spent six months of his time with the Allied Forces in Burma. The illustrations are from the drawings he made on the Arakan and Manipur fronts

I WAS travelling in a convoy of lorries carrying tar for the construction of what our troops call the 'Road to Tokyo'. We had left the plains of India behind and were steadily rising into the Naga Hills. The drivers were changed several times during the day, for the road, a great engineering achievement, was nevertheless tiring and nerve racking to travel along. The scenery was becoming very fine, immense mountains rising on all sides, their peaks softened by the thick jungle that covered their whole surface. By midday we came across our first groups of Naga tribesmen who not so long ago were all head-hunters. We found them all along the road, hewing and cutting out the sides of the mountain. Often flattened against the walls of the cliff, with no visible means of support, they poked and pounded the rock with iron rods, while down below hundreds more were carrying away debris or levelling the surface.

Men, women and children laboured together. The work and wages were allocated in the village council chambers, for sections of the road are farmed out to the community as a whole. The men are naked (it is said that the word *Naga* means 'naked people') save for complicated and colourful necklaces and earrings. Some wear thick ivory bracelets and garters of twine wound round their legs. When not at work they cover themselves with gaily-coloured blankets and, if it rains, with a cloak of matted grass. Nagas employed by the Government cloak themselves with brilliant vermilion blankets, a sort of kilt and leggings of woven bamboo.

Their villages are generally placed for protection at the end of spurs jutting out from the main formation of a hill. The cottages are thatched, while from the gables of some of the larger ones, a curious construction, resembling two inverted number nines, sticks out in front. I visited several of the villages and found that



Stanford, London

they all followed a similar pattern. A narrow path, planned for defence, by overhanging crags and many bends and turns leads to the walls and the gate of the settlement. Here the ground and the sides of the walls are pricked like a pincushion with thousands of split and sharpened bamboos about thirty inches long. I tried to touch one of these 'pungis' (as they are called) but quickly withdrew my hand, scratched in several places by others I had not seen—for they were pointing in all directions, some straight



Photographs from drawings by the author. Crown Copyright reserved

Angami Naga Headman and family at Kohima. The eldest son is wearing ceremonial dress. His father said, 'I am too old for finery.' The outsize drinking horn in the centre is full of the drink called 'zu', to be presented to the guest of honour at a party—for a special laugh. Note ceremonial spears decorated in scarlet and black. All the family apparel is woven and embroidered at home. The girl on the right is still very young as her hair is only just beginning to grow; when grown it will be dressed like her mother's in the background. Children's hair is close shaven

at me. The Ceremonial Door, cut out of a single tree-trunk, was open. It was a thick block of wood on which terrifying designs were carved. Generally they took the form of a stark naked prancing man, with girdles of human heads round his neck and belly. With one hand he waved a spear, with the other some ghastly trophy. Horror was intensified by splashes of red paint and tufts of real hair on the heads and body. On some of the other gates the designs were completely abstract and I thought them even more fearful, owing to the mysterious qualities that seemed to emanate from them. The style was not dissimilar to Negro sculpture; the same concave method of modelling the relief of the figure was used. But perhaps the most interesting aspect was the complication of abstract and geometrical designs. These the Nagas would use as small patches of embroidery incorporated here and there in their blankets and rugs, otherwise woven in broad

coloured stripes. In the whole of their work there is a great intensity of feeling, and they will decorate the simplest stake with some shape or other just for fun.

The main tribes of the Nagas are the Kon-yak in the north, the Angami near Kohima, the Ao in the south and the Chang in the east. These last, formed into an irregular police force to keep order among the wilder and still head-hunting tribes of the unadministered territory, are useful nowadays in keeping an eye on Japanese movements in the remoter corners of the hills.

We continued our journey past Kohima and Mao, a town held in great veneration by the Nagas, gradually descending into the fertile plain of Manipur State. Walled in on all sides by chains of hills hundreds of miles in depth, it is enchanting to come across fields of grass, of rice and water-lilies, and fat-bellied cattle; there are many gardens hedged in by tall and leafy trees, while wide and busy

roads cross the expanse of the plain from end to end. In the distance, in any direction you may look, lie a range of bright cobalt blue mountains.

I found the people beautiful to look at. The men have regular features, decorated with lines of paint in cream colour which harmonizes well with the rich deep brown of their skin. They are stripped to the waist and hang strings of minute wooden beads across their chest. The women pass along the dusty roads carrying on their shoulders pitchers of polished brass that reflect the sun in gold. Their robes are of a single bright colour: yellow or mauve or emerald green. The younger girls look at you cheekily from under jet-black fringes of hair.

In the evenings I watched the poses of the famous Manipuri dancers, moving in ritualistic dress slowly among the pillars of their houses.

After a rest of a few days we set off to visit the Chin Levies. Within a few hours we were climbing up into the mountains again, and later, at the end of the road, reached a scene of the utmost pandemonium. The unloading of lorries, the loading of hundreds of mules, the roar of bulldozers pushing up to the edge of the ravine, hurtling trees down into the distant torrent below, porters and coolies shouting, made a fantastic spectacle. British and Indian troops were digging and mining the rock face, sappers were spying out and checking up the 'traces' for the road. Mule teams were departing over rickety suspension bridges, while a haze of dust hung over the whole scene and the road advanced a mile a day into the mountains and jungle of Burma.

Here we met the Khasi porters, charming little people, childlike and always laughing. Their job was to carry enormous loads, jogging along happily over mountain tracks. They were quite a tiny people, averaging about 5 feet 2 inches in height. Their foreheads are narrow, the cranium very small indeed compared with the large jowl beneath. Their complexion is very dark, their hair black. Some try to grow 'Mandarin' moustaches but generally only succeed in a wisp or two. They have been provided with a sort of uniform, black shorts and shirt, which gives them a rather grubby look. They loved being drawn, made broad jokes about each other, and were as pleased as Punch. They knew a few words of English which they spoke with a Welsh accent. Mr Phillips, a Welsh missionary, had brought a thousand or so down from Shillong. During the evacuation of Burma they had done a grand job carrying

supplies to refugees stranded in the mountains by the monsoon. When they were told of the frightful sufferings of hundreds of children, old men and women dying of dysentery and starvation in the jungle, the whole tribe volunteered to a man and at first were unwilling to receive any payment.

During the last war there was a Khasi Pioneer Unit in France; in this war, they are doing fine work carrying supplies hundreds of miles over difficult country from road-head to our forward positions. Working on a near-by sector we found the Kukis, a local tribe who had come down from the neighbouring hills to work as porters and labourers. These are akin to the Chin tribes. Many of them went to France in the last war and worked all through as coolies in some of the larger ports. A small Kuki boy showed us, with pride, a medal won by his father in France. It was his most treasured possession, and his family and friends stood round in awe as he unwrapped it and held it out to us.

We now had to abandon our lorry and load all our kit, our rations and my painting materials onto the backs of mules, and strike out, followed by a long train of muleteers and pack animals, into the jungle on foot. Tracks in the Chin Hills follow the crest of the mountains—and very pleasant and cool it is there; but suddenly they will plunge five or six thousand feet into the sweltering gorge below, before they cross over and up onto another ridge as high as the last. Traveling in this way for several days, we at last reached our first Chin village, Tonzang. The approach was exceedingly beautiful, for the village was built high up on the mountain-side. The huts or chalets were built on stilts, the roofs were thatched, but some were in tin and looked very fine as they reflected the blue of the sky. Each hut had a wooden platform which served as a courtyard on the steep slope of the hill.

When we had rested a little we called on the village Headman. He lived in the most important building, bordered above by a thick wall covered in bougainvillea, while his courtyard was amply built overhanging the deep valley below. Several trees in flower closed in the sides of the wooden stage on which we were standing, while some trellis work made up a scene very like a Japanese print.

The principal well of the village was in his courtyard, so in a corner stood a continuous group of villagers and children with tin pots and urns. Near the well were some tanks, one of which was filled with fish; in another some large haricot beans were soaking. We





(Opposite, top) A Naga suspension bridge across the Manipur River; (bottom) Khasi porters resting on their way down to our outposts with supplies. These tribesmen were brought down from Shillong by a Welsh missionary. They did great work during our evacuation from Burma in 1942, carrying supplies and medicine to refugees stranded in the jungle by the monsoon. (Above) A rest by the wayside before entering the village of Lombang after leaving Falam which is placed on the crest of the mountain range in the distance: a normal day's march in the Chin Hills starting at 7500 feet descending 5000 feet to the steamy heat of the valley and up again 6000 feet to the crest of another ridge. On the left is the escort of Haka Chins, the mules and muleteers and two little Chin boys acting as cooks. They were good shots with a bow and baked clay pellets. The rest of the party, a film cameraman and a journalist, are pictured lying worn out on the track. In the right-hand corner is a burial-ground

discovered their use later. The Headman's family greeted us with much ceremony and led us into the council chamber, a large shed opening onto one of the sides of the courtyard. The walls were covered with hundreds of skulls of local animals: crocodiles, rhinoceroses, tigers and leopards, while a considerable number were horned beasts, some of great size.

As we were sitting there, the elders came in at intervals, started to argue, and distributed pieces of smoked pig (the hams were no larger than the 'knuckle' of a small pig in England). *Zu*, a local brew made from rice and other grains, was produced in large earthenware pots and we proceeded to drink, sucking the liquid up through hollow bamboo sticks.

The Headman's daughter stood near by, during the interview, leaning up against a

wooden pillar, smoking a large pipe with a glass filter. She was very attractive with long plaits, a loose bolero jacket and a short skirt, resembling, in her dress, a Red Indian squaw. We inquired about the pipe and were told that the women smoked all day, thus preparing nicotine water, used as a mild drug by the men. We now asked about a large bundle of poles, twenty feet or so long, that we could see standing upright in the centre of the courtyard, and one of the Chiefs answered with a disarming smile: "We reserve these for our enemies." Now the Chin is not a head-hunter by profession (as the Naga is), though in battle he will collect a head or two and may even now be keeping some hidden away in a dark corner of his hut. He is a hunter of animals, and glories in this. By religion he is an animist, worshipping a

Supreme Being, and the spirits of trees, springs and stones. The latter set up in places probably of historic importance to the tribe. He is polygamous, and his chief temptation is rice beer. Whole villages at certain festivals, marriages or funerals, will be drunk for a fortnight at a time. A few have been converted to Christianity by American Baptists, and they do not drink; others are Roman Catholics and concentrate on having only one wife.

During our journey we had already noticed a few small burial-grounds but on entering the village came across some of more importance. These are made up of poles of different lengths, some capped with the horns of cattle, and of tombstones made out of the local slate stone of the hills. The poles and stones are completely covered with intricate engravings of animals and personages. Some of the stakes are roughly shaped into human figures and heads. But some of them, especially the new ones, were engraved in a more accomplished manner. The movements of the animals in these were beautifully studied and some of the compositions were very ambitious, depicting tigers and leopards battling together for their prey. We asked the Headman about them and shortly afterwards the artist was produced. He was a charming boy of about twenty-three with Mongolian features. He took us to a graveyard and as he pointed out the details and movements of the animals he had engraved he chuckled and laughed like a child. He had a great sense of humour. He told us that all the figures on the stone represented the exploits of the deceased during his lifetime, the animals he had hunted, his wives and children, his firearms, and in fact as much as the family could afford. He charged about five rupees a figure (7s. 6d.), and on some of the larger stones many hundreds were represented. Still I was intrigued to know why his work was so much more sophisticated than the other engravings of the country, which were very primitive indeed and in fact less vivacious than the work of the Nagas. So he took me down to the village school (you find Burma Government schools in the most out-of-the-way hamlets throughout the Chin Hills) and produced, out of a dusty cardboard box, a well-thumbed set of 'German Chromo' prints of animals. I could not help thinking that it was an achievement that this boy, who worked with the rest of the village as a coolie labouring on the road or carrying crates on his back, had been able, alone here in the jungle, to create a technique of his own out of the oleograph and the traditional engraver's line

of the country. It would be interesting to see engraved on a plaque or corner-stone of a bridge he himself has helped to build the exploits of the Chin Hills tribesmen in this war.

We now continued our journey and soon reached the important village of Tiddim. Here we met the Chin Levies and their officers, who are fighting the Japanese. Flung out in front of the roads we are building are these guerilla troops recruited among the inhabitants of the country. Here the Chins are defending 650 miles of frontier.

In the north are the Kachins defending another large stretch. They are based on Fort Hertz and fighting in the Sumperabum area. Both Kachins and Chins are controlling Japanese movements till larger forces can be brought up the finished roads.

These guerilla tribes are supplied to some extent by mule pack and coolies who have crossed great distances on foot through the mountains, while the rest of their needs in ammunition and hospital-equipment is dropped from the air by parachute. They are continually patrolling for information, wiping out parties of Japanese who venture into the hills, and have taken part in some severe and epic engagements. The officers are extraordinary. One I met was a giant of a man with a flaming red beard. He was armed with a tommy gun, bandoliers, and wore a Robin Hood hat. Another, stripped to the waist, a couple of massive pistols tucked into his belt, would outclimb the Chin tribesmen themselves. The Levies themselves are armed with anything they can lay their hands on, home-made flint-locks, shot-guns and *dahs* (a Burmese knife). The rest of their equipment is based almost entirely on their own idea of what a soldier should look like. The one distinguishing mark of the Levy is a feather tucked into the headdress, which may be a turban, a funny sort of beret picked up in a bazaar, or a Japanese cap. They make their own gunpowder by filtering goats' droppings for saltpetre, and soaking the bean mentioned before for sulphur. The projectiles are old nails and pebbles.

These Levies are chiefly used for scouting and for sending into the Japanese-held plain for information. Other Levies are recruited from members of the Burma Rifles who returned home to their villages after the Japanese occupation. These, with the regular Chin Hills Battalion, in peace-time a police force and part of the Burma Frontier Force, do most of the actual fighting. We visited several outposts, among them Fort White and Stockade 2.



(Above) Chin village levies of the Kamhaus tribe armed with flint-locks and powder horns. They are used to scout and report on Japanese movements. (Below) A platoon of levies from the village of Tonzang. Note features often varying from the Indian of the old man, platoon commander, seated on the right, to the quiet Chinese of some of the others





Above Chin Hills Battalion, part of the Burmese Frontier Force. They were not evacuated from Burma and have been fighting the Japanese continuously. These men are of the Siyin tribe; seated is the Naib Commandant, the highest rank a sepoy can attain. *(Below)* Haka Chins from the south Chin Hills are generally divided into village rather than tribal groups as in the north. They are the wildest of all the Chins and in their villages are completely self-supporting





(Above) Village Headman and levies in ceremonial dress, near Falam. He is famous for his particular brew of 'zu'. (Below) These levies are ex-Burma Rifles. After the evacuation, Chins returned to their villages and when organized resistance was started were formed into a special Levy force fighting with the regular Chin Hills Battalion. This drawing was done in one of their outposts overlooking Stockade 2 (bungalow in left-hand distance) in No Man's Land, five miles from Japanese H.Q. These men are properly armed, but there were not enough uniforms to go round



To do this we had to climb down from the pine trees of the hills into the teak forests below. The noise of the crickets was ear-splitting, the 'cluck-cluck' of a tree lizard alarming. The heat down below was intense, and when all at once a million crickets stopped, the silence was enormous. The only sound was the brushing of our feet in a deep carpet of teak leaves.

On our way here we had crossed the highest peak in this part of the hills, Mount Kennedy, about 10,000 feet. As we approached the summit, generally shrouded in mist, we entered a most luxurious jungle. We had a glimpse of a barking deer, saw jungle fowl, and judging by the many noises of padding feet and crackling twigs this forest must be full of game. At one point where a shaft of light suddenly lit up the brown earth we saw a Chin walking naked along the path, carrying his blanket folded and neatly balanced on the top of his head. He was singing to himself and formed a perfect picture of the 'noble savage'.

The next stage of the journey we did by night, for it was a full moon and walking was more pleasant in the cool of the evening. From time to time we came upon a camp where, stretched across the path, a whole family of Chins lay huddled together in their grey blankets. We did not like disturbing them, but had to, as our mule train was coming up behind, silent as they padded along the dusty footworn edge of the track. When the Chins saw the faint outlines of the mules there was a general scramble and hubbub, and mingled with it the bells of their pack ponies startled by our arrival. We met the same adventure continuously, for the path is the only level surface and there is no traffic to disturb the sleepers. Now all around us were jungle fires, mostly lit by the Chins to clear spaces for cultivation. These fires looked in the distance like snakes creeping in the undergrowth. Nearer ones we could hear crackling and at times see a flame darting up into the branches and hanging for a second as the drying foliage burnt and shrivelled up. The moon shed a glamour of mysterious light on the spacious mountains and valleys around us. At a bend in the road a beast was crouching as we came upon him unawares, then suddenly he sprang noiselessly into the branches below. It was a black panther. The absolute silence of his movements confounded us. For so often at night we had lain anxiously listening to every noise in the darkness around us. Now we realized that the noisiest creatures were tree mice or squirrels, and that the really

dangerous beast you cannot hear at all.

Later we passed a group of porters dressed in grass skirts, such as Peloponnesians wear. Our Chin guide told us that they were of the Ngaun tribe from the village of Bual Kara. He was a very wild Chin himself, but added, "They are savage men." They are of quite different stock to the Chins, perhaps descended from the aborigines of the country. We found several coolie encampments along the track and were told that the Ngauns were carrying supplies up to the forward positions and along sections of the Front.

From here the path led in a gentle incline till we reached the village of Lombang with many banana groves and hedges of rambler rose. Above our heads a complicated system of bamboo water-pipes criss-crossed in all directions. Wild raspberries grew in profusion and bougainvillea. The look of the village was softer and richer than those we had passed before. A few of the Chin girls were wearing Burmese sarongs and had twined brilliant flowers into their hair. We passed through the village with regret at our hurry, and climbed down into the valley below. At the bottom, horses had been prepared to carry us up "the worst climb in the Chin Hills" to Falam.

It was on our way up this hill that we first appreciated zu to the full. Half-way up the hill, we were invited in, by the local Headman, to refresh ourselves. The drink he offered us was of a golden colour made from millet; it tasted like an exceedingly good old bottle of Normandy cider, and the effect was similar, for we reached the top of the mountain no longer afraid of our horses and the appalling precipices below us.

In a few minutes we reached Falam, the capital of the Chin Hills. Members of all the tribes were around us. The Hakas with their long hair done up in a bun on the forehead were the fiercest of them all. The Zahaus who carried their bun on the top of the head, the Siyins, the Welngos from the edges of the Lushai hills, the Khongsai tribe and the Taros, who came from lands bordering on the Kukis, wore their hair done up at the back of the head.

The Siyin, Naib Commandant of the Chin Hills Battalion, has reached the highest locally commissioned rank a sepoy can attain. I spent a considerable time here painting the various tribesmen. The women wear very fine necklaces of red or blue amber beads. Their hair is worn in plaits or loosely knotted at the back of the head according to their tribe. The unmarried girls wear a large conch shell decorated with tiny red spots, and were very

excited when I asked them to pose, thinking I intended to choose a wife. Our journey was now interrupted by the Japanese. They had started an offensive and had at one point cut the track out of the hills. We were advised against proceeding any further but to await developments in Falam. I spent most of the time drawing and in the evening we prepared zu according to the custom of the country. The millet, maize, or rice, already fermented by the addition of yeast, is emptied into a large earthenware pot. Banana leaves are used to press the grain well down in the bottom. Water is poured into the pot and in a short time the zu is siphoned out through bamboos.

In a few days the track was declared safe again, and with an escort of Haka Chins we set off towards Assam. Our return to civilization was uneventful, beyond the killing of an enormous snake about seven feet long. We found the road and our lorry many miles nearer to us than we had expected, and arrived in time to see the welcome given by villagers to the first lorries and jeeps they had ever seen. They covered the vehicles with garlands and spread flowers on the road over which they would pass.

In the hills to the west of the Chin Hills are the Lushais, and these tribesmen I met earlier on, while in the Arakan. They have mostly been formed into Army units, Pioneers and stretcher-bearers. At Rathedaung I came across a section of them working on a special signals job within a hundred yards of the Japanese, while in the Dombaik area fifty of them were attached to an advanced dressing station as stretcher-bearers. The doctors were full of admiration for these little men, who were always cheerful and ready to help, either in carrying stretchers down the rough jungle-clad hills or loading them onto country boats in the mud of the river-bank.

Then there is the 'Sampan wallah', the Chittagonian boatman, who rows his sampan standing upright in the stern like a Venetian gondolier. The evacuation of casualties, the bringing-up of reinforcements and supplies to a very great extent is done by him. These men often come under machine-gun fire from the air or bombing while carrying out their tasks. They have suffered many casualties, and I have heard of examples of boatmen, though fatally injured themselves, bringing their passengers, wounded British soldiers,



A burnt-out Buddhist temple on the Mayu front. When the author drew it it was being used as a forward dressing station for our wounded



(Above) *Descending the Mayu River in a sampan. The author and his party were making their way down towards the Japanese position of Rathedaung. The Chittagonian boatman was much more worried at losing the benefits of the tide by keeping close under the bank than at possible attack by Jap Zero fighters. Note sunken river boat in the distance. The trip was 18 hours and the party slept and ate in very confined quarters. (Opposite, top) Advance Brigade H.Q. near Rathedaung. (Bottom) Advance dressing station on the Dombaik sector of the front*

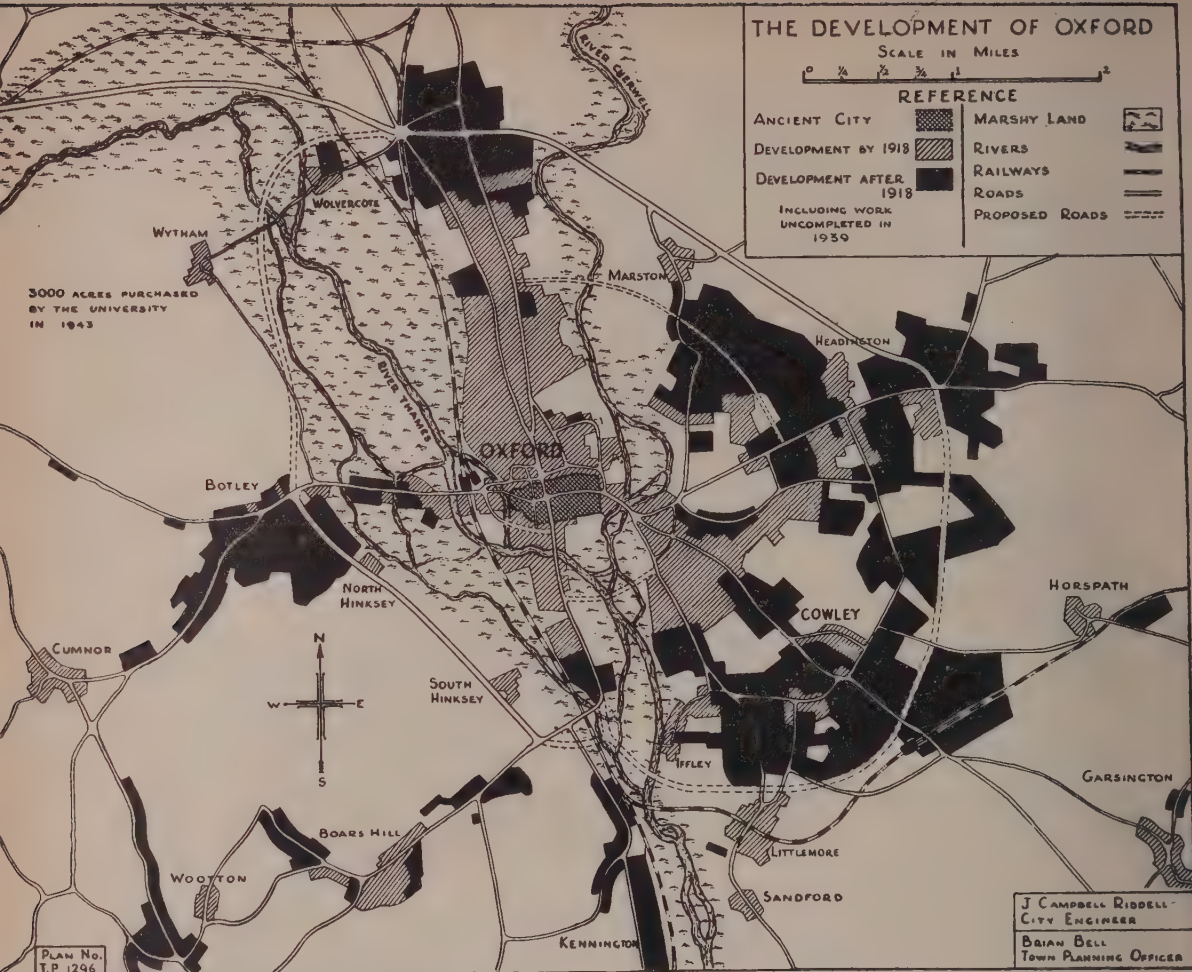
safely back to our lines.

Though I have written here of most of the tribes in the jungle who are helping us, I have hardly done justice to the Kachins, who have carried on as great a battle in the north of Burma as have the Chins on the Central Front. I was prevented from visiting them by the arrival of the rainy season. For the monsoon finally broke in earnest as I came down from the Naga hills.

As I looked back at them they stood out deep blue and grey, while all around colossal clouds gathered and rolled out over the plain

beneath me. Gusts of wind blew up into a hurricane and brought the rain lashing and spitting into the dust of the road. Darkness fell and the trees bent lower to the wind. Women screamed as their grass huts billowed and some were swept away, while I looked up in the sky and counted fifteen separate systems of thunderstorms raging with lightning and claps of thunder. And so I left, thinking of the British soldiers, officers and leaders of the Levies condemned to live through many months of monsoon, surrounded by their wild but friendly allies.





Changing Oxford

by G. MONTAGU HARRIS, O.B.E.

Since the days when it was a Norman stronghold, Oxford has seen many changes and is faced now with new developments and problems that may vitally affect its character and functions. Mr Harris, an Alderman of the City and Chairman of its Town Planning Committee, comments on the vicissitudes through which it has passed and points to the hopes and fears that now beset those responsible for its future

OXFORD has not always been a university town. In Saxon times it was a strategic frontier town at the tip of a peninsula of relatively high ground at the junction of the two rivers, Thames and Cherwell, guarding a crossing place over the marsh land which separated the kingdoms of Mercia and Wessex. The old frontier still exists as a county

boundary. Thus Oxford, which was in Mercia, is still separated from its rapidly expanding suburbs of Botley and North Hinksey, which for all local government purposes are still administered from the old Wessex town of Abingdon and Reading—an absurd position which, like the whole question of local government boundaries through-



From the author

out the country, is in urgent need of reform.

After the Conquest, in 1066, the town's main function was that of a Norman stronghold. A large area was cleared to form room for a castle and bailey. It became a place of royal residence when Henry I built a large palace on a site near the present Worcester College, and the whole city was enclosed within a strongly fortified wall.

The next great change was caused by the settlement of religious orders in and around the city. St Frideswide's Priory, replacing an Anglo-Saxon foundation, was founded for Austin canons in 1122 and they built much of the present cathedral in Christ Church which was originally their priory church.

The vast Osney Abbey, which was on the site of the present railway sidings and power station, was built in 1129. Other ecclesiastical buildings followed, and by the time of

the dissolution of the monasteries by Henry VIII the old walled city was completely surrounded by a green belt of land held by the various religious houses.

The dissolution of the monasteries profoundly affected the town. On the derelict sites of the great abbeys and priories in the west the industrial revolution found ample room for expression in the form of railway sidings, gas works and power stations, from which the prevailing wind could bring smoke and fumes to the city.

It is believed that scholars began to come to the town during the first half of the 12th century. Originally there were no colleges. The Masters of Art merely rented premises as lecture rooms, or as 'Halls' in which they and their students could reside. It is believed that over fifty of these halls ultimately existed, but only one, St Edmund Hall, still survives.



From the author

The last half of the 13th century saw the foundation of larger and more secure units in the form of colleges, which were endowed by wealthy benefactors. Merton was the first to be occupied in 1274. The colleges grew up mostly in the eastern half of the city because most of the western part was already used for the castle, the palace and religious houses.

Throughout all the great changes which took place in Oxford from very early medieval times right up to 1771 no new streets had been constructed, although the main function of the town had changed three times. By this time the state of the roads and bridges had become so bad and the traffic problem so acute that Parliament set up a special commission to carry out necessary improvements. The old city gates were removed, Magdalen Bridge was rebuilt, New Road was constructed to give better access to the west and many other long overdue public works were carried out.

Oxford in the 11th century became a Norman stronghold. St George's Tower (left), all that remains visible above ground of Oxford Castle, now part of the county prison



From the author



From the author

(Above, left) Old city walls in New College gardens; built in the 13th and 14th centuries, they follow the lines of earlier defence works; (right) St Edmund Hall, sole survivor of about fifty Halls in which during the 12th century Masters of Art and their students resided. (Below, left) Osney Abbey, founded in 1129, finest of the great monasteries and friaries which surrounded the town; (right) after the dissolution of the monasteries in the 16th century their sites often remained unused until mid-19th century: the site of Osney Abbey today, covered by electricity works and railway sidings

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H. H. Crawley

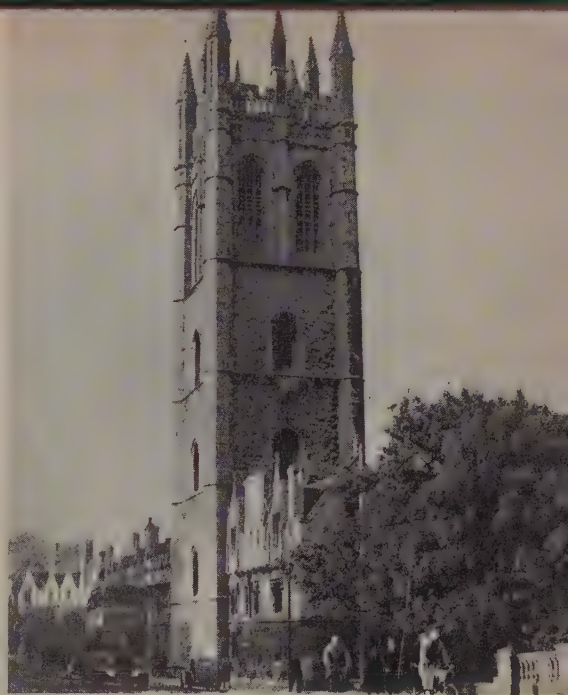


If history has any lessons for us, we should realize that once again the functions of the town have undergone far-reaching changes and drastic action is necessary.

If after the last war the country had embarked upon some form of well-ordered National Plan, embodying economic considerations as well as those concerned with purely physical development, it may well be supposed that Oxford and Cambridge would have been set aside and preserved as national centres of education, drawing, as they do now to an increasing degree, their students from every class of society.

After 1918, however, through the enterprise of one of its citizens, Oxford suddenly became a thriving industrial city. Obviously it is not in the nation's interest to 'regulate' men of initiative out of existence, but there has been no machinery to encourage or direct them to establish their works where they are most needed. Thus while many of our

Magdalen Tower from the bridge over which traffic between the ancient city and industrial Cowley must pass. It was built in 1779 to replace a medieval bridge



Black Star



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From the author

(Above, left) Cornmarket Street before the removal of the north gate. In 1771 Parliament created a special commission to carry out improvements, among them the removal of the old city gates. The Bocardo or city prison was above the north gate; (right) Cornmarket Street today, still the main shopping street of the town and a trunk route for north-south traffic. (Below, left) Castle Street, about 1820. During the 19th century its historic buildings were pulled down; (right) Castle Street today, no credit to the town, suggested site for much needed Municipal offices

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(Top) Carfax in the 18th century. A piped water supply, first provided for Oxford by a scholar of Christ Church in 1615, was distributed from the conduit which occupied the middle of the square and was removed in 1789 because of the obstruction it caused at the main cross roads in the centre of the city; (bottom) Carfax today, still the main crossing place for through traffic

industrial towns were becoming more and more depressed, Oxford doubled its population and swamped the surrounding villages with urban development. Colleges and other landowners made fortunes out of the rise in land values, which in some cases soared from £40 to over £1000 an acre after public money had been spent on the provision of sewers, a water supply and road improvements. The inter-war period was a time of unparalleled prosperity for the town, which must now count the cost and pay the price.

It cannot go back to a time of secure, unspectacular economy. The failure or removal of one of its major industries now would rapidly make it into something approaching a 'depressed' area. With this in mind Oxford's City Council proposes to encourage still more industries, though of a lighter kind, to settle in an industrial estate at Cowley after the war—a case of making the best of a bad job. But the Council must make it their business to see that the whole population is provided with the necessary amenities of life so far as these fall within the sphere of local administration. Unfortunately, sufficient measures for this purpose were not taken as the industries and the town grew. The change was too rapid for the town to adjust itself and the blame is on many shoulders. The fact remains that much must now be done.

In the new industrial area at Cowley (within the city) no good shopping centres or community centres were established, and consequently this large additional population flocks daily into the streets in the neighbourhood of Carfax, which is the crossing place of the four main roads in the old part of the town. These four roads, besides being the main shopping streets, are also classified roads for national traffic. High Street and Queen Street have to cope not only with through traffic from east to west but also have to take all the vehicles running between the railway station on the west side of the town and the industrial area in the east. Cornmarket Street and St Aldate's form part of a trunk route from the Midlands to the south. These streets were fully adequate for shopping purposes in medieval times and even when the northern spread of Oxford took place during the 19th century, but they are quite unequal to meeting the needs of an additional population of some 50,000. In one standard year before the war they accounted for 137 accidents involving death or injury; and their combined lengths are little over one mile.

Before the war, a system of 'outer by-passes' had been designed to carry long-distance traffic away from the centre of Oxford and two sections had been constructed. It is

urgently necessary to complete the remainder, but progress is retarded by antiquated administrative boundaries and methods. These important roads would pass through parts of Oxfordshire and Berkshire as well as over land within the city boundary. They also come within two divisions of the Ministry of Transport, one with its offices at Exeter and the other based on Birmingham, and it is no easy matter to get all these bodies to agree.

The question of housing is of course one which vitally affects Oxford. Fortunately there are not the vast quantity of slums from which many cities suffer. Nevertheless there is a certain amount of bad property which needs to be swept away.

The total number of new houses needed is estimated to be at least 4000. The City Council have some partly finished housing estates and also some land which may be developed for housing, but within the present boundaries of the city there is not sufficient land available for the erection of all the houses needed.

It has to be remembered that all vacant land within the city cannot be looked upon as available for housing. Sites are needed for schools and other institutions and there is an urgent demand for permanent allotments. The appropriate committees are carefully considering what land could and should be scheduled in the statutory scheme for this purpose.

Oxford is of course fortunate in that the extensive University Parks, the walk around Christ Church Meadow and, indeed, all college gardens are available to the general public. It is felt, however, that the many open spaces should be linked up by properly laid-out green walks or parks.

The recent acquisition, by the University, of Wytham Estate will add immensely to amenities of this kind, and Oxford City Council has decided that a 'Green Belt', which should be reserved mainly for agriculture, but might include recreation grounds and so forth, should be established round the city.

One blot upon the beauty of the city, which should never have been allowed, is the existence of gas works on an important stretch of the river. It is to be hoped, however, that the portion of the river immediately west of Folly Bridge will be cleared of unattractive surroundings and that it will be possible to lay out this site in such a way as to make the banks of the Isis continuously beautiful from Sandford to Godstow.

This brings me to the question of water courses. The Thames Conservancy, which is the body responsible, has spent large sums



H. H. Crawley



A. F. Kersting

(Top) The St Ebbe's area, comprising hundreds of 'over age' houses, will have to be re-developed when Oxford tackles her slum clearance problems. (Bottom) All the college gardens are open to the public—these gates are in the garden of New College—but to increase such amenities it is proposed that Oxford's many open spaces should be linked by parks or green walks



From the author

One of Oxford's two railway stations, neither of which can be said to enhance the beauty of the city

of money in improving them, to relieve Oxford from the floods which have been one of its chief curses. Further improvements are essential and it is desirable that some of the subsidiary water-courses should be merged in the larger ones. The difficulty lies in the effect that this would have further down the river and it is a matter which needs investigation from many points of view.

The railway station and the approach from it to the city have long been recognized as altogether unworthy of Oxford. The two railway companies have prepared tentative plans for a joint station, which are under consideration, but the question of the lay-out in this district is complicated. The erection of Nuffield College on the north side of New Road on the site of the old castle bailey and ditch should improve the approach considerably, while on the other side of the road further improvement is contemplated.

A Committee of the Oxford Preservation

Trust recommended the building of a 'civic centre' on the east side of Magdalen Bridge, now practically the centre of the population. The City Council have recognized the necessity of bringing together the many departments which are now scattered about the city, and are satisfied that the accommodation needed cannot be obtained by an extension of the existing Town Hall, but they are not in favour of a new civic centre to the east of Magdalen Bridge. It is considered that a better site would be contiguous to the county offices, which are to be rebuilt. This site, while convenient for the business interests, would afford a magnificent architectural opportunity, while by cooperation with the County Council it would be possible to convert the old portion of the castle, the 'Castle Mound' and the river beneath it into an attractive open space, which would entirely transform the dismal approach to the city as it exists at present.



From the author

The Clarendon Hotel, Cornmarket Street's most famous Georgian building, soon to be demolished

There is a great opening in Oxford for hotels of a modern type, with good gardens, and it was a severe blow when the famous Clarendon Hotel, the last really fine historic building in Cornmarket Street, was sold by Trust Houses to Woolworths. Many feel that the Corporation's powers to preserve such buildings should be strengthened, especially when they fulfil a good purpose.

In the past some of the colleges which have owned land in the city have disregarded the interests of the community at large and opposed improvements which would be to the general advantage. It may well be that the Town Planning Committee which has recently been set up by the Hebdomadad Council will help to bring about a change in this attitude, and certainly the University authorities are now taking a more active interest in planning.

I have referred to the Oxford Preservation Trust. Some suspicion is sometimes evinced

on the ground that its very name shows that its object is merely to preserve that which is old. That is by no means so. The Trust is not a University institution for the trustees include representatives of both City and County. It has conferred immense benefits on the city by the acquisition of land which is preserved from building for all time.

Thus, the City Council of Oxford may feel that, with the support of the citizens, it is making preparations for a future of which posterity may be proud. While anxious to preserve all that is worthy of preservation, it hopes to remedy some of the mistakes of the past and to provide for the growing industrial population in the best possible way. Oxford, it must always be remembered, is not merely a city and county borough. It is, as it has been for centuries, one of the greatest centres of learning in the world, and its future is a matter, not only of national, but of international concern.



A. F. Kersting



A. F. Kersting

Oxford University

The garden front of St John's College (opposite, top) famous for the size and beauty of its gardens; (bottom) Hall Quadrangle, Oriel, the college which in the 19th century numbered among its sons the chief supporters of the Oxford Movement. (Right) Merton College, the oldest foundation at Oxford. This photograph shows Mob Quad—whose name no one can explain—and the noble Perpendicular tower of the chapel which towers over it. (Below) Gate of Christchurch—commonly called 'the House' since it is not strictly speaking a college but the Church or House of Christ—leading to Peckwater Quad where its great library is housed

Black Star

A. F. Kerling







Black Star

Oxford University's first library was presented by Humphrey, Duke of Gloucester, son of Henry IV, in 1444. It was to supplement and restore his bequest that Sir Thomas Bodley, lover of books and a generous benefactor to the University, founded its successor, called after him and first opened in 1602. These photographs were taken inside the Bodleian and show the south-west staircase, a student at work on one of the ancient volumes and a statue of the 3rd Earl of Pembroke, Chancellor of the University from 1617 till his death in 1630. He purchased the Barocci Library, brought from Venice by a London stationer, and gave the bulk of it to the Bodleian, stipulating that students should have the use of it. Twenty-four years after his death, Oliver Cromwell bought the remainder for the Bodleian. The statue, cast in brass by Le Sueur from a design by Rubens, stood at Wilton till the 7th Earl, a great-nephew, presented it to the University



A. R. Kersting



Black Star



(Above, left) The library at Queen's College has a fine plaster ceiling and bookcases carved by Grinling Gibbons; (right) entrance to the dining hall at Balliol which, though it is one of Oxford's oldest foundations, was to its detriment largely rebuilt in the late Victorian period. (Left) The staircase to Christ Church Hall dates from the early 19th century; its Gothic fan-vaulted roof was erected in 1638

(Opposite, top left) Doorway of the old Ashmolean: built towards the end of the 17th century to hold a collection of scientific curiosities given to the University by Elias Ashmole, it still houses a museum of scientific instruments but the main floor—



A. F. Kersting



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—has of recent years become the offices of the Oxford English Dictionary. (Above, right) The Examination Schools, since the war used by R.A.M.C. personnel. (Right) The Hall, Wadham, a college that has been little altered since its founding by the widow of Nicholas Wadham in 1612. The hammer-beam ceiling of the Hall is early 17th century; the doors are later and the panelling was cut down and given a modern cornice in the 19th century

A. F. Kersting



Five Months with Guillemots

by RICHARD PERRY

FOR five months in the spring and summer of 1940 I lived on the Isle of Puffins, twenty miles out of Bideford Bay, studying birds. The island is three miles from north to south, and half a mile across the top. It is an island of granite cliffs and stacks, of shelving green sidings honeycombed with the burrows of black and grey rabbits, of rounded outcrops of granite under which pygmy shrews have their crannies, and of rather more than a thousand acres of pasture and moorland, rough-grazing two hundred breeding ewes, a score or two of cattle, red and fallow deer, wild goats and ponies.

The island has eighteen inhabitants, six of them keepers of the North and South Lighthouses.

My own dwelling was a ruinous keeper's cot in the lee of the old disused lighthouse 500 feet above the breakers thundering at the base of the steep cliffs a few score yards away; our music was the moaning of the wind through the lantern of the Old Light and the discordant wailing of seven thousand gulls by day and the sobbing caterwauling of shearwaters by night.

Storm or calm was of no account to the strange nocturnal shearwaters. So long as





(Opposite) Guillemots and razor-bills wheeling over the sidings and the North Lighthouse on the Isle of Puffins in Bideford Bay. Island landscapes include (left) granite cliffs and stacks, rock pools and grottoes, and moorland pastures where Welsh ponies (below) roam freely and find rough grazing

Photographs by Alan Richardson



(Right) Puffin Island's rugged and fretted cliffs, showing the myriad ledges and crannies that make them attractive to nesting sea birds. (Opposite) Though there are intervals of quiet on the flat-topped stack of the Devil's Chimney, where 500 guillemots sleep recumbent or stand one upon the tail of the other, there is for most of the day a ceaseless surge of cawing



there was no light in the night sky they came twirling out of the darkness at midnight, from February to September, crying their breathless "*chi-chicargo-chicargo*"; perhaps a thousand birds visiting their mates sitting on egg or chick in the rabbit-burrows on the sidings. Before the first greying light of dawn their serenade had ended and the change-over in the burrow had been accomplished. By day one saw them only now and again fishing in the tide-rips north and south of the island.

Built on the highest point of the island, the Old Light and its adjoining cottages and stone-walled paddocks attracted a big proportion of those migrant birds on passage over the island to more northerly breeding-

grounds. All and every day from the end of March onwards, swallows, martins and swifts were passing north, and a score of other species, from goldfinches to pied flycatchers, besides racing pigeons and painted lady butterflies.

In the wooded combes in the south-east corner were the haunts of the island's few small birds: half a dozen pairs apiece of chaffinches, dunnocks, linnets, robins and throstles; a dozen pairs of blackbirds and whitethroats; two pairs of wood-pigeons; and five cuckoos. The entire population of small birds—which included larks, pipits, stone-chats and the ubiquitous little wren—did not exceed four hundred pairs. In addition there were three pairs of ravens, five of





(Above) Incubating guillemots sit patiently hour after hour, with their eyes half closed: one sitting bird gently and industriously nibbles the throat and head of her neighbour, who turns her head back and shuts her eyes blissfully. (Opposite) Half the guillemots, perhaps, face the cliff wall: the other half face outwards—a row of silver bellies and a forest of slender brown heads bowing gracefully at the sudden appearance of the photographer round the cliff



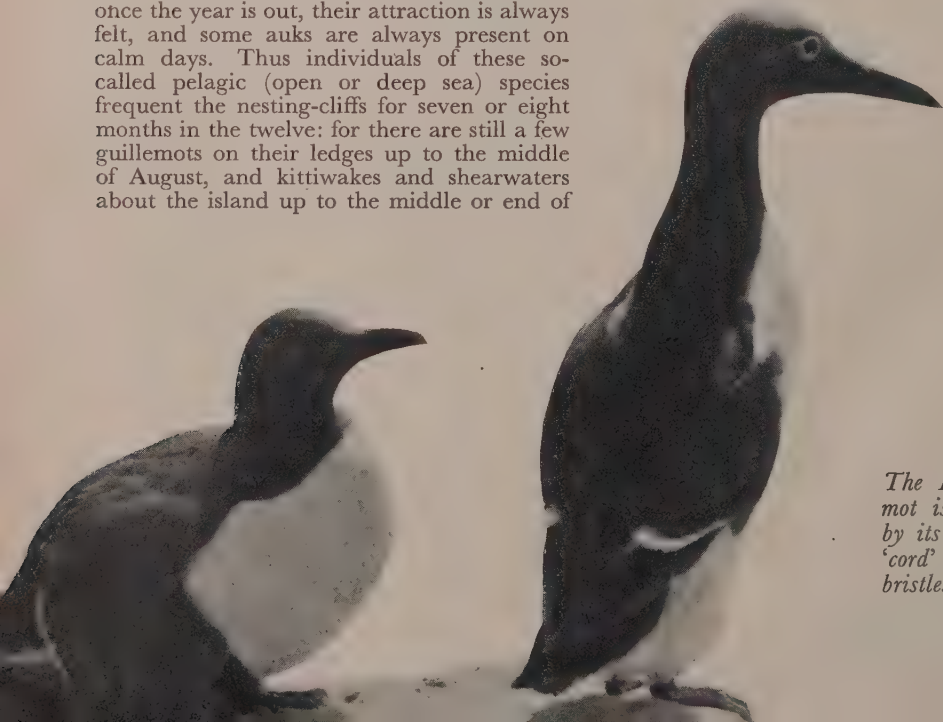
buzzards, and until this particular year, one or two pairs of peregrine falcons. But all these, and the gulls and cormorants, the deer and the seals who lay out on the reefs in the sun, were incidental to my main intensive study—some of the seventy-two thousand-odd guillemots, puffins, razorbills and kittiwakes.

The cliffs and promontories of the north and west coasts of the island are fretted by innumerable sea-holes and coves, and riven by chasms two and three hundred feet deep and seventy yards across. In autumn and early winter the ledges and niches of these cliffs are deserted, save for occasional pensive gulls who roost nightly on them, or a cormorant fishing in the deep waters of a cove. But at Christmastide (December 24, 1939) the first of 3000 pairs of kittiwakes came in from open sea to fish in the tide race, and the van of 19,000 pairs of guillemots to caw and jostle on the ledges and platforms of the cliffs. It is late in February or early in March before the kittiwakes actually settle on their nesting-cliffs, about the time that the earliest of ten and a half thousand pairs of razorbills return from their winter fishing-grounds, to compete with the kittiwakes for nesting crannies on the cliffs. And not until late in March does the bulk of three and a half thousand pairs of puffins come in to the rabbit burries on the sidings.

Until incubation, late in May, the attendance of the three auks at the cliffs is irregular, and the latter are frequently entirely deserted for days together in stormy weather; but once the year is out, their attraction is always felt, and some auks are always present on calm days. Thus individuals of these so-called pelagic (open or deep sea) species frequent the nesting-cliffs for seven or eight months in the twelve: for there are still a few guillemots on their ledges up to the middle of August, and kittiwakes and shearwaters about the island up to the middle or end of

September. Puffins and razorbills who go out to sea at the end of July are more truly pelagic: puffins, indeed, seldom voluntarily come within two or three miles of the shore from August to March.

After four or five months of wandering over hundreds or thousands of miles of pathless ocean, the breeding van of guillemots, kittiwakes and other sea-birds returns every year to their nesting-cliffs in the latter half of December, five months or so before they lay their eggs, when winter is only beginning in these north temperate latitudes. At midwinter if one goes out ten or twelve miles in a fishing smack, in the course of six hours' fishing one may meet with only half a dozen pockets of ones and twos and twenty-fives of guillemots: and puffins and razorbills much less often, or not at all; while occasional kittiwakes hover above. What catastrophic revolution takes place within a guillemot's organism that one December day he is contentedly fishing far out at sea, and on the next feels the urge to seek out a certain ledge on a certain rock in the sea perhaps hundreds of miles distant, to which very ledge he or she will return Christmas after Christmas? That they do so is proved by those oddities, the Bridled guillemots, who differ from their Common fellows in having white monocles and cords, and who, as a one per cent minority on the island, are individually distinct. We know, it is true, that those



The Bridled guillemot is distinguished by its 'monocle' and 'cord' of tiny white bristles

Bridled guillemot's mate and chick. Long grey spikes hang like a mane low over the chick's nape, and contrast with the soft dark-grey fur of its back and the iron-grey of its breast



organic processes associated with reproduction are already maturing within the guillemot towards the end of the year, but can one ignore also the coincidence of this precocious homing with the light climacteric of the Winter Solstice? Henceforward there will be a daily increasing period of light upon these northern latitudes until the Summer Solstice, and the biologist has shown us that radiation and the ultra-violet and infra-red properties of light have a profoundly stimulating effect upon a bird's plumage, display, song, breeding and migration.

Thus the guillemot at sea in midwinter responds to the dual stimulus of organic change and light climacteric, and is driven by some inward and inexplicable urge to the place with which such sensations are inherently or personally associated: the breeding-cliff. For on his return he is occupied for the first five months with two factors only: to retain an inch or two of territory and to mate

incessantly. But if you ask me how organic change is objectively linked up with a nesting-cliff hundreds of miles distant, and by what means a link is set up between cliff and winter fishing-ground, I cannot tell you—nor can anyone else. Yesterday the guillemots swam silently over the sea, diving and flapping their wings, as they had done daily for some five months past: today, without any intermediate period of adjustment, they are noisy and quarrelsome on the cliffs. The mere act of exchanging one environment for another has brought about a revolution in behaviour.

This massing of guillemots on the cliffs is always a marvellous thing to see. An explosive *curr*, as of a cooing of giant doves, surges hundreds of feet up to the top of the cliffs. Peering over the sidings, one can make out, far below, tens of hundreds of tiny guillemots massed like beetles on the flat tops of 'stacks', and packed in ranks on broad ledges and deep niches in the face of the cliff.



A guillemot sits on newly-hatched chicks so tightly that only a slight pushing-out of the shoulder of one wing betrays the fact that it is brooding a chick and not incubating an egg

Of 150 thronging a yellow-stained platform, twelve feet by three, half, perhaps, face the cliff wall, as they will tend to do in months to come when they have eggs or chicks. Some stand, others are recumbent, asleep, with heads tucked as close as possible into the cliff face. The other half face outwards: a row of silver bellies and a forest of bowing slender brown heads. Typical penguins they seem, so full-fed on whitebait and britling that their fat white bellies are as spherical as eggs. They afford opportunities for scientific study in natural conditions which must be unique. For some eight months the most intimate details of their everyday life and behaviour lie open to the eye of the observer. Nothing is hidden. The very egg is laid upon the naked rock.

There is much affectionate noisy billing between mated pairs and head-nibbling on the part of the male: an attention evaded

more often than not by the female, who is more intent on posturing herself over an imaginary egg. These continual inter-marital bouts of half-angry stabbing, leading to a certain jostling of contiguous birds, engender savage stabbings between adjacent males, with flashing of open yellow throats and resentful cawing. Occasional guillemots chew stray grasses or straws from old kittiwake nests—though the species fashions no nest in the present stage of its evolution—and there are always some guillemots pointing their sharp bills into crevices in their rocky platforms as if responding to some latent impulse to seek nesting material. More significant still, one or two hold whitebait in their bills. Making no attempt to swallow their fish, they continually bow their heads and point their bills under their bellies between their webs—to find a chick two or three months unborn and certainly not con-

sciously anticipated! The extraordinary thing is that the mate of the bird with the fish, while nibbling the fish affectionately, makes no attempt to take forcible possession of what neighbouring guillemots hopefully recognize as an edible object: the two of them twiddle it between their webs animatedly. Yet she willingly surrenders it to him, whereupon he also attempts to feed an imaginary chick.

Early in May the majority of guillemots have come in to their breeding-cliffs for good, and are fishing in onshore waters. After mating intermittently for more than four months, the male guillemots, both paired and bachelor, are still unsatisfied, but at long last the females reject their advances, when, towards the end of the month, the first eggs are laid. Matings among those who lose their eggs, however, continue into the first week of August. The females patter uneasily to and fro between their eggs and the edge of the cliff, before settling down with shuffling, 'tenting' wings. Whenever settling down on her egg—and being a nervous, excitable creature, she is continually doing this—a guillemot pushes out and drops her wings a little from the shoulders, forming a tent about the egg, while rolling it between her shanks and outward-pointing webs with her bill. Some birds keep their wings partially dropped while actually sitting; others close them. Owing to the enormous size of her egg, a guillemot leans forward over it rather than sitting on it.

The egg may be broadways beneath her; lengthways, thick end under; or thin end under, which is the usual and proper position, when it is partially or completely contained in a brooding-pouch of feathers dropped around it; but the egg does not normally rest on her webs, as is often stated. An almost complete disregard for their eggs is characteristic of many guillemots, and one finds eggs lying about unattended all round the cliffs. As the period of incubation draws out, however, some pairs begin to sit very closely, though others continue to be irregular. The increase in the total number of eggs is slow, for the gulls rob them ceaselessly. Out of a hundred nesting pairs in one gully not one may bring off a chick: on the other hand, thirty pairs on another part of the cliffs may take away twenty-five chicks to sea in July.

The individual reactions of the guillemots to their persecutors vary according to age, sex and the time they have been sitting. One will look on without overt excitement while a gull eats her egg; another may rush at the robber, too late, with an agonized squawk: a third quite happily settles down on the bare

rock after the robbery: and those who have got into the rhythm of sitting usually keep off the gull with their darting bills. It is the saving of the species that the sitting guillemots are not territorially aggressive: one sitter gently and industriously nibbles the throat and head of her neighbour, who shuts her eyes blissfully; and no sooner do the hot, restless, aggressive males—fighting till a stronger impulse to preen takes one of them abruptly—take over incubation (often for a period in the afternoon) than they become equally immobile.

Before I began watching guillemots intensively I could never ascertain the exact period of their incubation. I learnt why not when I found that of three bridled birds under observation, one sat thirty-four days, a second forty-four days and a third forty-nine. The first chicks hatch at the end of June. By this time most guillemots have got into the habit of sitting tight—so tight that only a slight pushing-out of the shoulder of one wing may betray them to be sitting on a chick and not on an egg; but they take no offence at other chicks poking at them, though under the stress of alarm a sitter will peck away another's chick, or in the confusion allow a chick to nestle under either wing. A big chick, however, straying into the brooding-spots of old birds with chicks, is savagely pecked away, and the statement that guillemots habitually brood each other's chicks is not borne out by my experience. I have known only two such instances, though birds that have lost their own chicks will brood temporarily unattended chicks: only to be summarily evicted on the return of the rightful parents. Both parents take it in turn to brood for several hours at a stretch, and the change-over is usually associated with the arrival of one parent with a fish: both cosset the chick, preparatory to such a change, and are vastly intrigued by it, elbowing out the shoulders of their wings and tenting them about it. An interminable (ten minutes perhaps) bowing of heads and 'tenting' manoeuvring about the chick with the customary cawing is more or less traditional before it is allowed to take an enormous sand-eel larger than itself. The 'tenting' serves the now somewhat unnecessary evolutionary purposes of preventing the chick from staggering over the edge of the cliff, and other guillemots from seizing the fish.

The nervous and excitable guillemot contrasts strongly with the equable and confident razorbill or puffin, and it is interesting to find that this nervousness is inherent in the chick: for if a parent rises from her chick at a sudden



At the north-east end of the island a steep crag—Peregrine's Eyrie—hangs over the 200-foot high Rock of Gannets: a sphinx of white granite, bleached by the sun and whitened by the briny spray

alarm, the latter screams the house down, staggering to and fro over the ledge, apparently distracted, seeking wildly to burrow under the parent's wing, in which position it is commonly brooded, with head poked up between the parting of its parent's back and wing. At ten days or so, however, the bigger chicks pass much of their time standing clear of their parents, and are much more active than their smaller brethren; in a fortnight they clamber all over the limited precincts of their rocky enclosure, and bob up and down a little like their parents. Their black eyes have already the deep orbital grooves of the adults, though the whitish egg-tooth on the bill is borne up to the time of their departure.

At ten o'clock in the morning fishers come up to the cliff every minute or two minutes, fighting their way into the scrum of brooding birds, their beaks with their precious loads held high in the air out of reach of their fellows. In this same high-headed way they

often alight among their fellows at mid-winter. On crowded stacks the delivery of fish to chicks tends to be more immediate than on sparsely populated ledges: the chick taking the fish tail-first and gulping it down whole. The chicks are fed at three-hour intervals, twice, and probably three times, in twenty-four hours. Unmated females and those that have lost their chicks also bring up fish to their ledges, and often manœuvre with their fish before other birds' chicks, which always attract them greatly. The latter, however—and I think this remarkable—evinced little interest in the fish. These chickless birds stand about the stack-tops, with their fish, 'tenting' imaginary chicks, passing the fish from their own 'tent' to their mate's and making great attempts to feed non-existent chicks with enormous sand-eels: titillating the eels in their bills, slapping them in pools of water, and laying them with infinite care under their bellies: all to the customary accompaniment of roguish caws

and excited bowing of heads and nibbling of bills. They continue to do this until the final departure of all the guillemots from their breeding-cliffs.

At the beginning of July young mackerel becomes the staple diet of the chicks, and some of the old birds are in a desperate hurry to deliver their loads of fish. The ocean is calling again. Before the middle of the month some of the three-week-old chicks known to me have disappeared, and one evening an old bird and her chick are to be seen swimming out to sea from the cliffs. How has the chick got down to the sea from the sheer stacks and gullies two or three hundred feet in height? At twilight there are many old birds waiting on the sea below the cliffs, continually sipping water and occasionally calling when they look up at the cliffs, and the gullies are clamorous with the incessant cries of big chicks, who awake from their diurnal lethargy, and answer one another persistently, dancing around their platforms on tiptoe with vigorously fanning wings. As the light fades, so the old birds become feverish with excitement and anxiety, as some of the chicks begin to venture beyond their own nesting-spots. Suddenly there is a terrific plop as a chick flies down from its ledge a hundred feet up the sheer cliff and hits the water in the gully, followed by the parent, and away the two go to sea frequently diving, though up to now the chick has not moved more than a foot either way from its hatching spot on the naked rock. More often than not both parents accompany the chick down. All, or nearly all, the parents try to entice the chicks to the edge of their respective

ledges, struggling backwards encouragingly with 'tenting' wings, but it is often five or six nights before the chicks can be finally persuaded to take the terrific plunge.

As each chick alights in the sea, adults swimming below the cliffs come up to see if it is their own, the rightful parent digging viciously at them, as they accompany it fifty or a hundred yards out to sea before turning back. The physical hardihood of these tiny chicks, not one-third the size of their parents, is incredible. In this plunge to the sea from two or three hundred feet many smash down horribly from crag to crag of the cliffs, finishing up in the boiling surf over the fanged reefs below; and still they swim, diving, out to sea, unhurt—which clears up the long controversy that has raged over their method of getting down to the sea from apparently impossibly high crags.

Towards the end of July many guillemots have left the breeding-cliffs, and others are impatiently calling their chicks down while it is still afternoon—without success at so early and dangerous an hour. Once down from the cliffs, the chicks stay well out at sea, though one or both parents continue to return to the nesting-ledge for as long as a fortnight after the departure of the chick. In three weeks the entire population of chicks is evacuated, and by the second week of August there are no guillemots left on the cliffs. A seven months' cliff-life is ended, but a mile or two out to sea one meets with one parent and child still swimming together, the other adults banding together elsewhere for the autumn, preparatory to their return to the cliffs once again before the year is out.



The Geographer in the Modern World

by GEORGE H. T. KIMBLE

GEOGRAPHY is not what it used to be: this is just as well, since for many older readers their most vivid recollection of the subject is the hours spent at school wrestling with the names of the railway stations between King's Cross and Edinburgh, and the all too numerous capes and bays which articulate the British coastline. While everybody knows that this particular form of pedagogic tyranny is no longer in vogue, by no means everybody knows what has taken its place or what the geographer of today regards as his real business in life.

Modern geography, as this Magazine has consistently tried to show, is primarily concerned with studying the earth as the home of human communities, with examining the ways in which man has shaped the habitable parts for his own ends and has himself been influenced in the process: that is, it has as much to do with 'chaps' as with 'maps'.

Underlying this study is the knowledge that the human—or cultural—environment does not represent a haphazard conjunction of conditions, but a grouping in response to various physical and biological controls. It follows that the geographer is dependent for his material to a very large extent upon other sciences: on the physical side he draws heavily upon physics, meteorology, climatology, geology and geomorphology; on the biological and human side, upon botany, agriculture, ethnography, economics and even history. This 'borrowing' of material is, of course, a common practice in all scientific and technical work. Doctors daily avail themselves of the knowledge of the chemist, electrical engineer, precision instrument maker, radiologist, anaesthetist, psychiatrist and so on: in the same way does the house-builder call in the corporation engineer, the stone-mason, bricklayer, plasterer, decorator, electrician, plumber, etc. No doubt in the past many students supposed that their job was finished when they had collated—scissors-and-paste fashion—the more 'geographical' parts of cognate sciences: in fact, however, none of these subjects really covers the geographer's field.

Take, for instance, the phenomenon of rain: the physicist's interest in it may be said to

end the moment he has solved the question of *how* it is produced; the geographer, on the other hand, wants to know *why* it falls where it does and when it does (that is, what are the factors governing its regional and seasonal distribution), and also what sort of response the rainfall, in a given place and time, elicits from the plants, animals and men living there.

Or take the subject of land-forms such as mountains, valleys and plains: to the geomorphologist it is their mode of origin and the evolution of their present-day configuration that is of primary interest; to the geographer what matters most is their influence on the location of towns and villages and on the activities—agriculture, mining, industry and trade—carried on by the inhabitants of such communities. And similarly with the other contingent sciences.

This habit of thinking of man—not abstractly as 'Mr Everyman' of no fixed address, but concretely as Tom Jenkins, coal-miner in the Rhondda Valley, Wu Feng, rice-farmer in the middle Yangtse region, and Otto Schmidt, textile worker in Dusseldorf—is the distinctive feature of geographical studies. That being so, some of the questions the geographer must continually ask himself as he examines a given country or community are:

Why does man use the land and its resources as he does, and how has he modified the area by his occupation?

What are the advantages and handicaps of the area from the standpoint of human needs, and in what respect has it constrained him and in what respect has it left him a free agent?

What relationships, if any, exist between man's territorial arrangements, political institutions and ideas, and the human environment?

How far is the social life of a particular community, its customs and mode of living together (its corporate personality, in fact) born of the soil, and to what extent does it stem from racial inheritance?

The first set of questions can only be answered by examining the existing economic adjustments in conjunction with the historical development of the region. The second set

can only be answered if we possess "the touchstone of areal studies", that is, after we have mapped the significant physical and biological distributions (data indispensable to all regional planning). The third question can be answered only by reference to the first and second—not directly: "failure to do so", as an American Professor of Geography has said, "invites untenable generalizations and helps to make much so-called political geography really political theory, with at best a geographical slant". The fourth question takes us outside our terms of reference, strictly speaking, but it is desirable to find an answer to it so as to arrive at the comparative strength of geographical and non-geographical influences on the corporate life of the region.

The examination of these questions presupposes an understanding of the manifold ways in which human life has been and is still affected by topography and drainage, by the distribution of mineral and soil resources and by the zoning of the world into distinctive climatic and ecological provinces. It also presupposes that for any given region we shall know the distribution and density of

population (if possible, in the past as well as in the present), the various ways (productive and otherwise) in which the land is utilized, the characteristic forms of settlement and occupation (including their historical evolution), and the status of industry and commerce—in short, the structure of the human economy.

In making this examination the geographer is in some danger of thinking that, because he has split the whole of his subject into parts, he can next take those parts, stick them together, and so have the whole once more. But the world of man is a living entity, profoundly complex (and not by any means always rational) in its behaviour, more given to initiating processes than finishing them, and with a notorious spoiler of averages: it is no more possible to conjure up the life of a human region with the aid of purely 'static' studies of, say, the distribution of its population and its economic activities than it is to convey the personality of an individual through the medium of a camera study. Something more 'kinematic' is needed. The moment we give geographical



Photographs by the author

In considering land forms such as mountains, valleys and plains, what matters most to the geographer is their influence on the location of towns and villages and on the activities carried on by the inhabitants. Here, for example, is Lanersbach in the Tyrol, home of a pastoral community, at hay time



Man is always trying to control or change his environment and by the aid of modern science turns isolated regions into health resorts or playgrounds: (left) a railway now brings thousands of tourists to the Royal Gorge of the Arkansas River in the barren Rocky Mountains; (right) a huge hotel makes the shores of Lake Louise a health and holiday centre

elements human associations, the moment man enters the world stage, the scene becomes as changeable as man himself. The liabilities or barriers of one generation become the assets or stepping-stones of the next. Uninhabited deserts like parts of Southern California, thanks to hydro-electric power, irrigation by 'remote control', and a sunny climate, are made to blossom as the rose and become the focus of real estate speculators: 'whitemen's graves', such as Sierra Leone, are conquered by tropical medicine and lead to a reorientation of colonial policy: mountains, like the high Alps, long avoided because of their treacherous storms, isolation and natural poverty, are turned into playgrounds, health resorts and sanatoria. Unfortunately, not all the changes are for the better. In many parts of the world the good earth has been turned into waste land: the Mississippi River alone carries a burden of top-soil amounting, annually, to approximately 400 million tons. In our own island we are yearly destroying several million tons of first-class agricultural land in the process of winning gravel, chalk and iron ore from the earth.

Clearly there is no room here for the fatalism of the determinist, for while it is undoubtedly true that some men 'accept' their environment (in much the same way as plants

and animals do), the great majority consciously try to control it, even to change it. Among living things theirs is the unique power to understand the ordering of the natural world, to foresee what will happen next, and to anticipate it, if need be, by taking 'avoiding action'. For instance: though frost cannot be averted, timely frost predictions enable commercial fruit-growers to light 'smudge' fires which minimize the hazard, even if they do not remove it. Again, though many areas of the world will always be subject to drought, dams and reservoirs enable farmers to secure such a measure of control over their environment that they become well-nigh independent of climatic vagaries: the resulting stabilization of production goes a long way towards converting gamblers into planners.

This ability to plan and predict is the ambition of every thinking man, not least the scientist for whom it is at times the basis of remedial programmes. But the value of any prediction varies directly with the planner's knowledge of the phenomena concerned: where such knowledge is partial, prediction is likely to do more harm than good. Thus, it is sheer folly to expect that any dependable forecast can be made of the food resources of a region, its population capacity, or its most

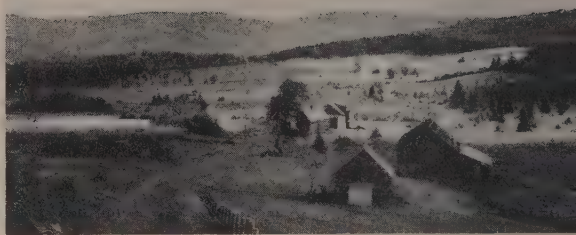


The geographical liabilities of one age become the assets of the next. (Left) The northern fringe of the Sahara shows what can be done with an unpromising environment by the help of irrigation, terracing and a sunny climate. But not all the changes are for the better. In the Corn Belt of the U.S.A. (right) millions of tons of first-class agricultural land are yearly being destroyed in the process of winning coal from the earth

profitable lines of economic specialization unless the forecast is founded on close analysis of the character of the soil and the underlying rocks, the climate (including the seasonal variations of heat and moisture, the incidence of drought and frost, and frequency of damaging storms), and those features of the terrain itself which are likely to influence farm practice (e.g. its suitability or otherwise for large-scale mechanized agriculture). It was largely for want of such information at the time of their settlement that so many homesteads along the arid fringe of the Canadian prairies have been abandoned: between 1921 and 1926 in the Medicine Hat area of Alberta alone 36 per cent of the farms went out of occupation.

It would be equally foolish to assume that because the planner has all the information he wants, his forecasts are bound to be right. Nature has a remarkable aptitude for *not* running true to form, and for springing surprises. As the Spanish proverb truly reminds us: "When God wills, it can rain with any wind". So it really comes to this: no forecast involving geographical elements can be more than a first approximation, and no forecast which does not reveal an expert insight into the behaviour of those elements need be taken seriously.

While the modern geographer is the last person to dogmatize about what can and cannot be done with the cultural environment, he is no believer in magic. Admittedly human ingenuity and enterprise have accomplished a great deal: they have extended the limits of the habitable earth, increased the human capacity of many lands, and made possible higher standards of living; but there are still very real limits to the number of people that can be supported on a given piece of land. Some countries (among them Japan, Great Britain and most of the western European states) have already reached that limit, it would seem, and now contain standing room only. The population problems of such countries are likely to become acute in the immediate post-war years, which can hardly be expected to see a return of the highly favourable circumstances of international trade in which these large societies were nurtured. Plans for international settlement which fail to take into account the geographical requirements of communities—be they whole countries, or merely industrial, commercial or cultural provinces—and assume that 'going concerns' are made by drawing lines on a map, can never succeed. Nations need food as well as frontiers, and economic resources as well as tariff blocs and restrictive



There are real limits to the number of people that can be supported on a given piece of land. In the rich, but very cramped pasture lands of the upper Connecticut valley (left) this limit has been reached. In the 'wilderness' near the Maine-Canadian border (right) the limit has been over-stepped and the land is reverting to type

immigration laws. The Atlantic Charter admitted, by inference rather than expressly, the force of this contention when it declared that the signatories would "endeavour, with due respect to their existing obligations, to further enjoyment by all states, great or small, victor or vanquished, of access, on equal terms, to the trade and raw materials of the world which were needed for their economic prosperity". Exactly how this is to be done remains to be seen. Japan, to take only one instance, is going to be stripped of all the possessions she has come by since 1894 when she had a population of less than 30 millions, as against her 75 millions of today; it is worth remembering that the Japanese islands are not much larger than our own; their cultivable area is smaller, and they are very poor in minerals. Yet their population exceeds ours by over 60 per cent and is increasing by a round million a year.

The business of the geographer, then, is to assess the importance, in time and place, of environment in human affairs, and to apply his findings to contemporary problems. By bringing the study of man down to earth in this way, he claims, not to be able to offer a self-contained system of explanations for man's social behaviour and institutions, but to provide a vantage-point from which to regard these things. The geographer may be compared to a spectator of a silent, captionless film. The film is a record of things seen from one angle, with all the high-lights and shadows, the limitations and advantages, peculiar to that point of view. At the same time it shows all there is to see, usually a lot more than the human eye can take in, as anybody knows who has watched a prize-fight and subsequently seen it on the screen. But being silent, the film leaves much to the imagination

of the viewer: at best he can only guess what the characters in the story are saying or thinking, and why they are acting as they do. All the same, if he uses his wits he can probably get the gist of the story without the help of either captions or commentator. So with the geographer; he sees all there is to see of man's relation with his environment, and with experience and training he can usually get the gist of what he sees. But for the fuller understanding of the plot and by-play, he requires the assistance of other students of humanity. The historian, for instance, can tell him how much influence the past (*e.g.* oral and written tradition, social institutions and conventions) has on the present: the economist can say how far vested business interests and fiscal policies have governed man's use of his resources, and to what extent industrial momentum—the inertia of the 'going concern'—controls the location of his factories and towns: the technologist can point to man's growing power over environment, thanks to such inventions as the internal combustion engine, the overhead transmission of electrical energy and the employment of new materials. And for those who have ears to hear, the preacher will remind him of the oft-forgotten fact that man does not live by economics alone: that many of his responses arise neither from the exigencies of his material surroundings nor yet from the needs of his mortal body, but from his spirit. Assisted thus, the geographer is able to apprehend the life, work and problems of his 2000 million fellows; and this surely is an understanding which all thinking people should strive to attain. For without it how shall we be able to follow "peace with all men" and as a nation play our part promoting the Four Freedoms?



The Swiss Navy

by HENRY O. ERNST

A TIME-HONOURED joke is dead. The Swiss have a Navy! It owes its birth and steady growth to the war, which has profoundly affected Switzerland's economic life although she is not a belligerent. She produces hardly any raw materials, and has been surrounded for years by



Axis or Axis-controlled, and often half-starved nations. Switzerland has always been dependent on imports and, in war-time, finds it next to impossible to obtain shipping space for them as well as for equally vital exports of finished goods to markets overseas. Even now, with the help of her small fleet of cargo vessels and British navicerts, she only just manages to provide her people with a minimum of food and essential commodities. Her present basic rations for food, clothing and fuel are only about one-third of those in England.

How has a country with no seaboard or maritime tradition found its way to the Deep Sea Lanes? How did Switzerland get her cargo boats, manage to keep them afloat, and bring them safely back to port? How does she find her crews and succeed in training them?

At the end of 1939 the Swiss Federal War Transport Office chartered fifteen modern Greek ships with a total tonnage of 115,000. These vessels, captained and manned mostly by Greek and Dutch sailors, carried grain and fodder from the Americas. They discharged at Genoa or Marseilles, whence the cargo reached Switzerland overland by rail and road.

With the Italian attack on Greece in the autumn of 1940, these Greek ships could no longer safely enter the Mediterranean, and had to unload at Lisbon. Neutral, and therefore reasonably safe tonnage was extremely difficult to obtain. The Swiss went as far afield as Panama to charter ships for essential imports. As the war spread to the U.S.A., certain South American States and Yugoslavia, the possibility of hiring suitable merchant tonnage in the World's shipping markets grew less, and a solution to the problem of obtaining supplies had to be found.

The Swiss Government therefore decided early in 1941 to create a Swiss Mercantile Fleet and to purchase the necessary ships. In accordance with the Barcelona Convention of 1921, Continental countries are entitled to fly their own national flag at sea. A Swiss Maritime Code was drawn up, and the country stepped into the rank of seafaring nations as the youngest recruit. In collaboration with private Swiss firms, the Federal War Transport office succeeded in a relatively short time in collecting a sizable fleet of 19 merchant vessels totalling some 120,000 tons. Two of the ships, s.s. *Caritas I* and s.s. *Caritas II*, are being used to bring British and U.S. Red Cross prisoners of war parcels to Marseilles, whence they go overland to Geneva for distribution to the Camps. The remainder

Modern units of the Swiss Merchant fleet: (top), the s.s. Santis; (middle) the Caritas I in Lisbon harbour and (bottom) about to leave a U.S. port



Photographs from the author, by courtesy of the International Committee of the Red Cross, Geneva

of the fleet are registered as Swiss supply ships, and recognized as such by both groups of belligerents. They are unarmed, clearly marked 'SWITZERLAND' in big letters on both flanks, and sail with lights full on. Only one, the s.s. *Maloja* (2640 tons), has, as I write, been lost through fouling a floating mine.

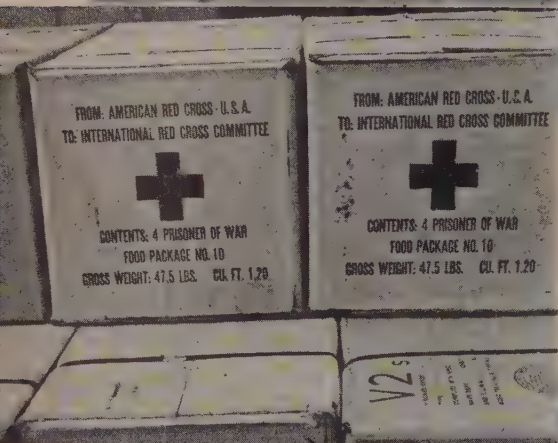
The training of national officers and crews for Ocean Service presented difficulties. Sailors with the necessary teaching qualifications and experience are naturally scarce in Switzerland. However, there are a few men who in their youth emigrated to seafaring countries and became sailors.

A Swiss shipping company in Basle now runs, with the necessary Government approval, Naval Training Colleges for both officers and men, where thorough practical and theoretical training is available to Swiss nationals. The Rhine harbour with its extensive and modern shipping installations, and the river itself, serve excellently for this purpose.

Thus was the Swiss Merchant Navy born. It has grown sturdily since 1939, but whether it has come to stay and will be able to play its part after the war is an open question. The desire to keep the flag-flying and to share, after the war, in ocean trade, is certainly behind it.

(Above) *The Rhine harbour at Basle which deals with 3 million tons of river traffic in a year.*
 (Right) *Safeguard against air attack: the large Geneva cross painted on the deck of Caritas I*

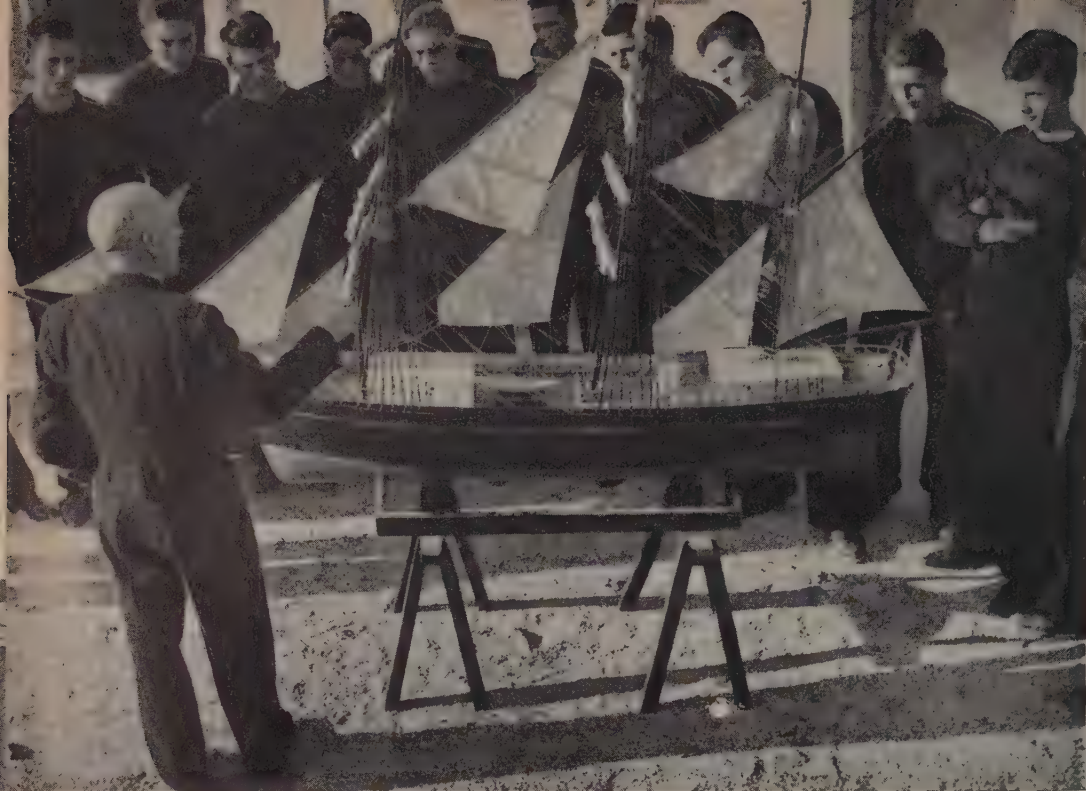




(Above) Officials and crews at unloading of U.S. standard packages, each containing 4 individual P.O.W. parcels; (below) Geneva Main Railway Station. (Opposite, top) H.Q. International Red Cross at Geneva, (bottom) its 'Hall of Honour', with bust of Dunant, the Geneva citizen who founded it in 1864. The emblem is the inverted Swiss flag (red cross on white ground), the motto *Inter Arma Caritas*—hence the parcel-boat names

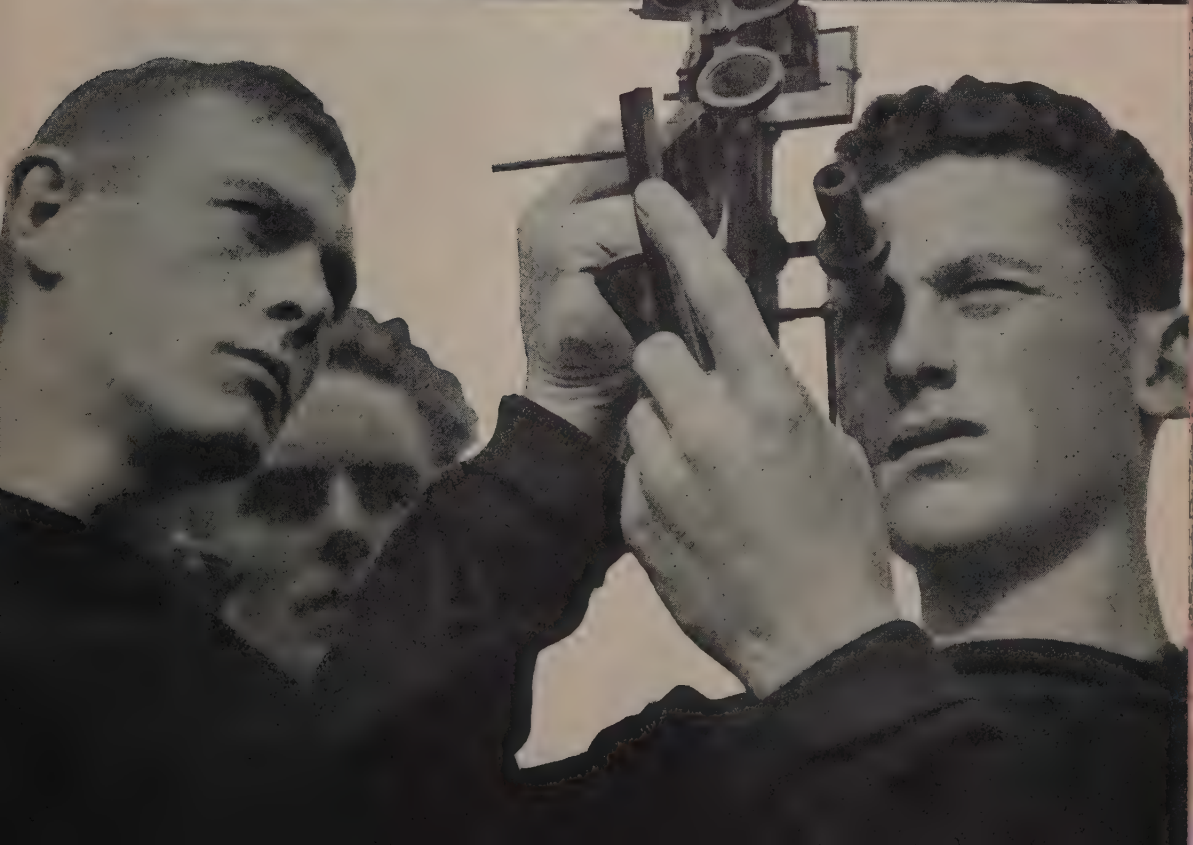






(Above) *Swiss Naval Training College, Basle: "a lesson in Sail"*. (Below) *Students at work in a class room. (Opposite, top) Future Swiss Naval Officers learning the intricacies of the mariner's compass; (bottom) "shooting the sun": cadets trying the sextant*





How We Are Governed

II. King, Lords and Commons

by QUINTIN HOGG, M.P.

In his previous article Captain Hogg described the physical structure of the Houses of Parliament and the way in which the actual functioning of the Legislature is conditioned by it. In the present article he analyses the balance of forces in our Constitution and traces the historical evolution by which power has come to reside in the Executive, that is in the Prime Minister and his associate Ministers with the Cabinet at its centre. The author, as chairman of the Tory Reform Committee, has an intimate knowledge of the way in which this power is both established and checked by the other partners of government, the King, the Lords and Commons and the People

"You will observe one curious trait," said Sidonia to Coningsby, "in the history of this country. The depository of power is always unpopular. All combine against it. It always falls. Power was deposited in the great Barons. The Church, using the King for its instrument, crushed the great Barons. Power was deposited in the Church. The King, bribing the Parliament, plundered the Church. Power was deposited in the King. The Parliament, using the People, beheaded the King, expelled the King, changed the King, and finally for a King substituted an administrative Officer. For one hundred and fifty years Power has been deposited in the Parliament, and for the past sixty or seventy years it has been becoming more and more unpopular. . . . As we see that the Barons, the Church, the King, have in turn devoured each other, and that the Parliament, the last devourer, remains, it is impossible to resist the impression that this body also is doomed to be destroyed, and he is a sagacious statesman who may detect in what form and in what quarter the Great Consumer will arise."

These words were first published in London exactly one hundred years ago when, in May 1844, Mr Benjamin Disraeli, M.P., author of *Contarini Fleming*, offered the public his new novel, entitled *Coningsby, or the New Generation*.

When his *Life* came to be published, in 1912, his biographers, writing of this view of constitutional history asserted that, while it was obvious that it contained an "element of Paradox, few competent historians would now care to deny that it also contains a large measure of truth, originality and insight. Parliament, as foreshadowed, has rapidly declined, and 'the great consumer', if not the Crown is its reflection the Cabinet, to which Parliament transferred the power it had wrested from the Crown." They added,

"We are obviously in rapid movement to some new goal which is not yet discernible."

A generation has passed since then, and the time has clearly come for a new estimate of the relative functions of the five political elements in our Constitution: the King, his Ministers, Lords, Commons and People.

First, then, the King. The political power of the Crown continued to decline throughout the reigns of Victoria and her successors. By contrast its influence did not diminish. Its prestige and its popularity increased. Its symbolic value was never greater.

"Our ancient hereditary monarchy," writes Mr Amery, "is in a sense today essentially a symbol, the personal embodiment of the continuity and unity of our national and imperial life. But it is a symbol of immense and abiding potency. It stands as a continuous reminder to the Executive from top to bottom that its duty and responsibility are to the Crown, in other words to the nation and to the Empire as a whole, and not to any party or section. Our ministers are the servants of the Crown. Our soldiers are the soldiers of the King and not of the Government of the day. It stands too for the strength and authority of Government as such. We are proud of the fact that our system of government is parliamentary and democratic. But that does not mean that we are governed either by the electorate or even by Parliament. We are governed by the King in Parliament. . . ."

My own view is that this appraisal, although just, is an under-estimate of the purely personal responsibility of the Sovereign. One of the ultimate safeguards against unconstitutional dictatorship lies in the coronation oath of the monarch. No march on London could mimic the march on Rome unless the British monarch broke his coronation oath as did Victor Emmanuel and entrusted the seals of

(Right) "Power was deposited in the great Barons." King John at Runnymede, with Magna Charta, the Charter of Liberties he granted to the Barons in 1215 when he agreed to keep the law and not to abuse the royal prerogative. (Below) "The Church, using the King for its instrument, crushed the Great Barons": Wyclif sending out his preachers with the Bible in 1378. (Disraeli's history quoted here is of course a false simplification. The Church of England never in fact occupied so predominant a position as he states)



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[Above] "The King, breaking the Parliament, plundered the Church." The Church and its leaders were the instruments of Henry VIII before they became his victims. The mural picture in St. Stephen's Hall shows Sir Thomas More, Speaker of the House of Commons, refusing Cardinal Wolsey's imperious demand to obtain for Henry VIII a subsidy without due debate in the House. [Bottom] "Power now deposited in the King": Henry VIII, a bloody tyrant, none the less used Parliament as the instrument of his tyranny. The illustration is from Holbein's picture of Henry giving a charter to the Barber Surgeons

(Right) "The Parliament, using the People, beheaded the King". This satirical print shows Cromwell holding Liberty and Church at the point of the sword. The kingdoms of England, Scotland and Ireland sleep. The chariot, drawn by dragons and driven by the devil, runs over Charles I whose head is cut off. (Below, left) "The political power of the Crown has declined. But its popularity has increased". Such a caricature as this of William IV entitled "Leap Frog. Down Constitution Hill" would never be tolerated today; (right) early volumes of Punch are full of ridicule of the Prince Consort and even Queen Victoria, and their numerous children are made fun of



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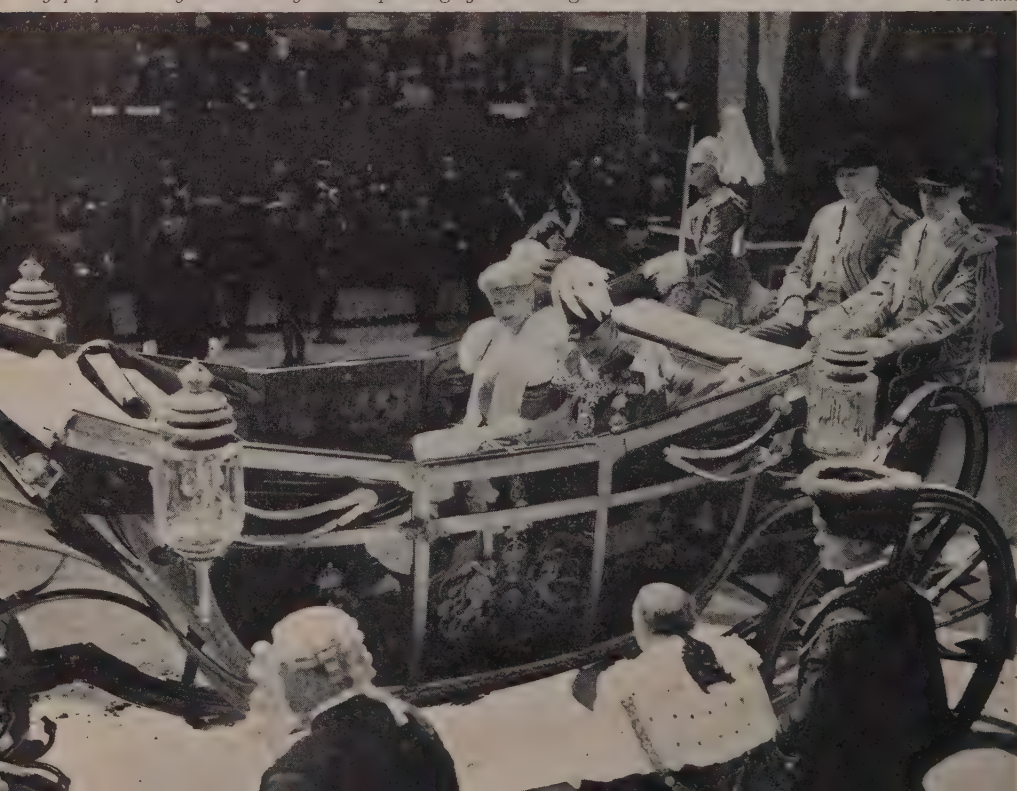
Reproduced by permission of the proprietors of Punch



The Times

(Above) "A Coronation ceremony is of more than temporal significance". King George V leaving Buckingham Palace for Westminster Abbey on his Coronation Day, the last coronation in which the Royal Creams were used—eight pure cream stallions with blue eyes directly descended from the Spanish royal horses of the 17th century, used on state occasions from the accession of George I, who brought them from Hanover, up to 1921. One break occurred when George III, incensed to hear that Napoleon had seized a team from conquered Hanover and driven behind them through the streets of Paris, refused to use them for seven years. (Below) "The immense popularity of the monarchy" was clearly demonstrated in 1935, King George V's Silver Jubilee year, when he and Queen Mary drove in state all over their capital. (Opposite) "Affectionate Loyalty" was responsible for huge crowds of people who for hours before the passing of the cortège lined the route

The Times



office to Ministers who, had not the backing of Parliament. The Courts would refuse to admit the validity of decrees issued by such Ministers or of any *Reichstag* summoned without the King's own Proclamation. If it is the Sovereign's duty to accept the advice of his Ministers in all things, it is also his duty to accept advice from no one else. There is reality behind the pageant.

In our own day the monarch has exercised two other prerogatives himself. It is he, suitably advised but really sovereign, who selects the order in which he sends for statesmen to assume the office of Prime Minister. Precedents there are in plenty, but none is quite decisive. The only limitation in his choice is the admitted necessity for the new Minister to obtain the support of a majority in the Commons. Let no one who has lived through a period in which a Baldwin was preferred to a Curzon, or a Churchill to a Halifax, minimize the importance of this selection.

Scarcely less important is the power of advice. In theory it is the Minister who advises the Sovereign, and this advice the Sovereign is bound to take. But although he must take it without offering a word of criticism in public, in private he can say exactly what he thinks of his Ministers to their face.

The functions of the Sovereign extend far beyond the purely political field. The life of the Sovereign and his family plays in the life of the people the part that the great pagan festivals played in the life of the Roman populace. It is not primarily religious, although a royal marriage and a coronation ceremony are of more than temporal significance. It is the romanticizing of life itself, the gilding with all the pageantry and symbolism of royalty the life of the ordinary man. A royal birth becomes a festival of birth, royal children are depicted in nurseries and cottages as the very pattern of human childhood. A royal marriage is a national marriage festival, a coronation a national dedication. It is this fact that accounts for the immense popularity of the monarchy and the affectionate loyalty to the personality of the monarch. It is this also which gives rise to sharp sensitiveness to the Sovereign's observance of convention. For all the pomp and circumstance, the reigning monarch represents the enthronement of the ordinary man. He is one of us. He is no inspired musician, no profound scientist, no brilliant orator, no pretentious politician. He serves in the wars, but not really as a great commander. In his person he symbolizes the virtues, the affections, the homeliness, even the humility of his ordinary subjects.



The Times

The administrative power of the Crown is exercised by the Executive, the dominant partners in the large association of Government. This is the characteristic of the modern British Constitution which marks it out from other democracies and accounts alike for its suppleness and survival. The French Chamber dominated its Governments, and produced chaos. In the United States, President and Congress possess independent authority and differing spheres of action. In Britain the Parliament chooses the Government and then submits to its general direction. A general election is in effect not merely the election of a Chamber but the election of a Prime Minister and a team of associates. The House of Commons is not merely a deliberative and legislative assembly but an electoral college, none the less real because its functions are never performed directly.

This position has been arrived at partly because at the beginning of the 18th century we did not forbid, but rather encouraged, the principal Ministers of the Crown to be Members of Parliament, partly because while other countries elected their Chambers for definite periods we retained in the hands of the Executive the power of dissolution.

Members of Parliament may defeat an administration, but only at the price of facing their own constituents—a process which they seldom relish.

The power of the Government over Parliament is exercised largely through its control of Parliamentary time; the influence of the Opposition is made effective by their ability to interfere with Government plans. Both involve organization and both militate to a great extent against the freedom of the ordinary member.

The battle between Government and Opposition led in the 19th century to continuous curtailments of the private members' rights in the Commons. Since the Irish reduced obstruction to a fine art the Government invented their counter weapons of the 'closure', the 'kangaroo', and the 'guillotine'; and made ever-increasing encroachments on the time allotted to private members.

The closure is a motion passed by a Government majority curtailing further debate on a particular question. The Government proposes "that the question be now put"—and if the motion is accepted by the Chair a division takes place on it without debate. If it is passed, a division on the main question takes place without further discussion.

The kangaroo is the method by which the Chair, under the general authority of the House, selects from the amendments put down by private members only those which raise important issues, 'hopping over' those which it does not consider important.

The guillotine is a procedure whereby the Government majority can impose a compulsory timetable, with the result that if a certain stage has not been reached by a certain time all further questions are determined by division without debate.

These three methods, originally designed for exceptional times, are gradually becoming more and more frequently employed to increase the volume of legislation by curtailing discussion on individual items. If even these methods fail, the Executive can threaten a dissolution by making any particular issue a vote of confidence.

Side by side with these methods of controlling the House, the Executive has resorted more and more to what is called Delegated Legislation. Under this procedure Parliament passes an Act whereby Ministers are entitled to issue regulations for certain purposes, and these regulations, unless annulled by resolution of the House, have all the force of a law passed by Parliament after three readings in each House.

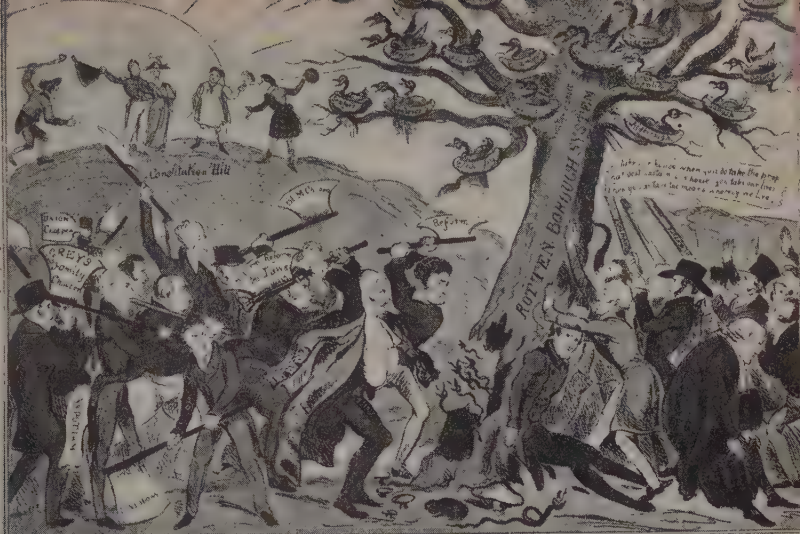
The circumstance which has enabled the

Government to control Parliament to this extent has been the increasing volume of legislation which has to be passed in order to deal with the complexity of modern life, and the consequent restriction on Parliamentary time. When Disraeli rose as a private member to introduce a motion urging the unification of the Consular and Diplomatic Services (a reform which had to wait for accomplishment until 1943) he spoke for over three hours. Today, the motion, the speech, and the length of the speech, would be quite unthinkable. Even in peace-time private members' motions are restricted to Wednesdays during part of the year and two complete debates are taken in the course of a day. In wartime private members' time has been completely abolished and still the Government complains of an overcrowded programme. Private members' speeches are considered of inordinate length if they extend beyond half an hour.

The use of delegated legislation as a means of overcoming the difficulty has been the subject of considerable criticism. On one side, extreme Conservatives like Sir Herbert Williams have been proclaiming the danger of this form of legislation in the hands of a revolutionary Government with a Party majority. On the other Mr Morrison has been suggesting that the relief on Parliamentary time involved in limiting the number of Bills with their elaborate Committee procedure would enable Parliament to do its work more efficiently. Both in a sense are beating the air. I can imagine no more effective way of obstructing Government business than by initiating a series of prayers against the regulations of Ministers—provided only that debating time was allowed. On the other hand, it is quite clear that the introduction of regulations has in the past not diminished, but on the contrary tended to increase, the number of Bills passed through Parliament in the ordinary way.

The real solution lies, not in increasing or diminishing the extent of delegated legislation, but in increasing the organs of the House of Commons, as distinct from Members, to deal with the Government in a collective way and not on the basis of the machine-made party majority ordinarily produced in the division lobby. Groups of Members are gradually banding themselves into Committees of sufficient size to influence Government policy and Party Whips. Sometimes these are unofficial, like the Tory Reform Committee, of which I am chairman, or the Active Back Benchers Group organized by Sir Herbert Williams—or similar committees

The true political Revolution in England came with the Reform Bill of 1832 when the life of the modern political parties began. A Reform cartoon



The Reformers' Attack on the Old Rotten Tree; or, the Foul Nests of the Cormorants in Danger.

Kisling Studio

A cartoon of 1843 in which Disraeli attacks Peel. But the position of the Conservative Party today is still largely Peel's work



Reproduced by permission of the proprietors of Punch

"Supply Unlimited", a cartoon of 1884 shows Gladstone, leader of the Liberal Party, reeling out words. Disraeli too was a lengthy speaker, as a private member he spoke for over three hours when introducing a motion to unify Consular and Diplomatic Services. Today private members' speeches are considered inordinately long if they take more than half an hour of the House's time



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and groups formed in the Labour Party, or to secure particular objects between the parties. A group of private members seeks to extend this system officially and make delegated legislation and other matters the subject of scrutiny by Committees like those of Congress. It remains to be seen whether this method of proceeding can be engrafted successfully on our Constitution.

Side by side with this change between Parliament and the Executive have occurred changes in the relationship of the two Houses of Parliament to one another. It has been, broadly speaking, true since the Commonwealth that the Lords have been junior partners in the association, in spite of their traditional description as 'the Upper House'. They have never had control of financial legislation. Even in the heyday of the 'Venetian oligarchy' individual peers exercised their authority by influencing seats in the Lower House rather than by the direct use of their legal powers in the Upper.

Since the turn of the century the prestige and power of the Peers have steadily declined. Most unwisely they tried conclusions with the Commons by interfering with the Budget of 1909. This was quite contrary to established usage, and the result was the severe curtailment of their legal powers by the Parliament Act of 1911.

The real position of the House of Lords is, however, far weaker than might be assumed even from these legal restrictions. Under the Parliament Act the Peers can still delay all measures other than money bills for two whole Parliamentary Sessions, and this power if adroitly and consistently used would be quite enough to produce chaos and overthrow a Government. The real power of the Execu-

(Bottom, right) *The effect of the modern Parliamentary system is to magnify the personal aspect of the contest between Party Leaders. This tendency, illustrated by the Punch drawing of 1870 (captioned "Critics" and showing the two political leaders each holding and disparaging a book written by the other), was first clearly seen in the opposition of Gladstone and Disraeli; (left) the campaign against the Peers, which culminated in the Parliament Act of 1911, has its roots deep in the 19th century: Mr Gladstone here is portrayed wheeling his ballot Bill of 1872 over the toes of two members of the House of Lords. (Top) The rise of the power of the Executive has largely curtailed the power and prestige of individual members of Parliament. A St Stephen's Review cartoon of January 1886 called "Police Regulation for the New House of Commons: Muzzling the Members"*

tive with its majority in the Commons over the Peers resides, as before the Parliament Act, in the use of the prerogative to create sufficient Peers to effect the passage of its measures. It was the threatened use of this prerogative which secured the passage of the Parliament Bill itself; there can be no doubt that a revolutionary Government could and would effectively drown opposition by a similar threat if the remaining legal powers were used with determination.

The remaining authority of the Peers lies in persuasion and influence rather than in legal privilege. Whatever the merits of the hereditary principle the Peers normally attending debates are usually of outstanding personal merit and collectively represent a higher measure of administrative experience than the House of Commons itself, from which, with Industry and the Services, they are normally recruited. A debate in the House of Lords can embarrass a Government, not by the threat of obstruction—which is not serious—but by the weight of opinion reflected in the press and in the constituencies which they can marshal. In addition to his possession of a platform undisturbed by the swaying moods of the electorate, the individual peer has also the valuable privilege of being able to hold high office without seeking election to the House of Commons.

It can now be seen where the new depository of power resides. It is the Executive which by an adroit use of the party machine has partially devoured the powers of Parliament. The party machine has been used to establish a direct relationship between executive and the people. When a general election takes place the great party machine, aided by the Peers, and the new incalculable factor of publicity, build up the personalities of the great political leaders. Individual candidates stand or fall by the ruses and mistakes of the generals of the political army. Elected to Parliament, they find their powers limited by the great pressure on Parliamentary time which makes the voting automaton the selected favourite of the Whips. Exercising their power of judgment and independence they are threatened with the withdrawal of official support, and a general election in which they will have an official candidate standing against them. The depository of power is the Executive; its instrument is the party machine organizing a minority for political ends. But, says Sidonia, it is impossible to resist the conclusion that this new devourer is also doomed to be destroyed, and he is a sagacious statesman who may detect in what form or in what quarter the Great Consumer will arise.

My Friends of the Ituri Forest

by H. M. ROLLESTON

THE Ituri Forest lies in the eastern Congo under the Mountains of the Moon. From a camp on the forest road, Ruwenzori appears to you morning and evening only, for in the daytime the mist caused by the equatorial sun on the eternal snows blots out the range completely. The clear peak Margharita stands up above the trees at evening, so close that you throw back your head to look; while again at dawn from the banks of the Ituri River a hundred miles further on, you may think you are looking at the boiling up of a huge thunder storm mounting from the horizon and then find that the dark banks are the wooded slopes of the mountain banded with white mist, beginning to drift together as the sun rises higher. Stanley in *Darkest Africa* describes the scene just as I have seen it.

Scattered groups of pygmies are to be found in the heavy forest of the Beni-Irumbu road, and in much greater number in the forest along the Irumbu-Stanleyville road. Stanley speaks of them in their swarms, but the numbers are much reduced now.

At Beni Sir Harry Johnson first saw the natives, wearing the striped skin belts which revealed to him the existence of the okapi. Survivals of a prehistoric Africa, the pygmies and the okapi dwell side by side in the dark glades of the forest, and only the pygmies can tell you the movements and habits of this strange solitary animal.

The expedition I accompanied, the eighth organized by Commander Gatti and his wife Ellen, was concerned with the capture alive of young okapi and bongo and for special safaris was dependent on the pygmies for guides in the forest. Such guides work under the local Bantu chief and a strict etiquette must be preserved when engaging their services, which must always be done through this Bantu chief.

The Bantu who live along the roadsides and at the edge of the forest vary in type. They have a pygmy strain in some villages which accounts for cases of slight build and lighter colouring, but the usual height when healthy is 5 ft. 5 or 6 in. Some are long-headed with strong bold features, deep brown in colour rather than black; others are the round woolly-headed primitive negro, and there is also a coal-black finer featured type, and even groups who are reddish like the North American Indian.

Kalume was the name of the village at the foot of the track leading to our base camp, and the work for us there drew a number of the more active inhabitants into the deep forest, which before the coming of our expedition they had regarded with terror. This attitude was due to legends of evil spirits and other matters, probably circulated by Leopard men emissaries, the cult having their own reasons for keeping the area select.

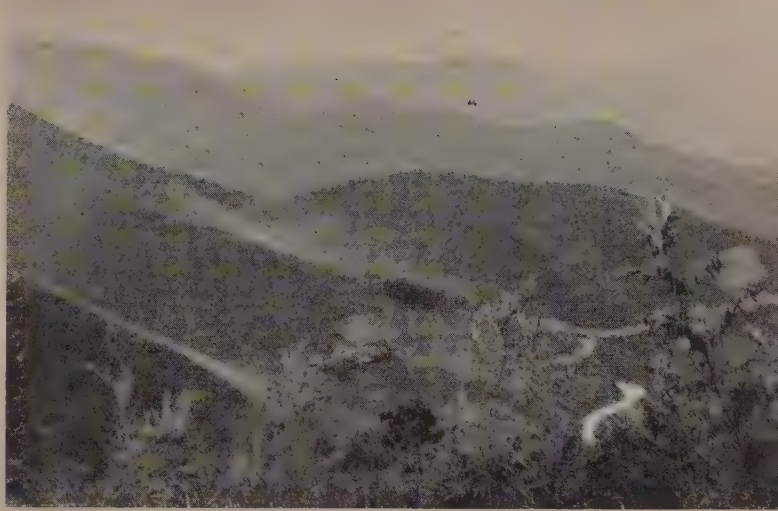
However, the spell was broken by the Bwana (master) and Ellen who, guided by pygmies, cut a track four miles into the darkest forest, and selected a place to clear by a lovely little river, near which okapi tracks had been found, showing that it was a drinking and bathing spot for the animals.

Here a little secondary village was established below our clearing, and on moonlit nights when funds ran to *pombe* (native beer), the wild song of the Bantu lilted up over the tree-tops,



Stanford, London

Entrance to the Belgian Congo from the Uganda side. The white road leads down to a customs station by a rail across the road. The other side of this rail you are in Belgium—you drive on the right side of the road and French instead of English is the alternative language to the native dialects. In the bamboo scrub on the Uganda side live the only specimens of the giant gorilla found in this locality. The far hills are volcanic, Dead-Sea-like in colour, scored with lava streams, the foot-hills of four active volcanoes. In the daytime they are blotted out by a flat mist, but at night they glow across the desolate valley



H. M. Rolleston

Above the Albert National Park on the road to Lubero. The expedition's cars are being packed after Christmas night spent in the nearby Rest House. Mists shroud the hills after a night of terrific rain. Lions are numerous in the deep grass of this country but they lie up during the storms and are silent



H. M. Rolleston

The track from the village of Kalume to the base camp, called Izamboho. These men are widening and strengthening it. The forest is profoundly dark save where the sunshine breaks through; where the beams lie, butterflies of every colour and variety congregate. In the mud of the path, among elephant foot-prints and buffalo and antelope tracks, the natives detect the rare and distinctive print of the okapi. Hidden birds sing in the depths, great black toucans flap heavily over the tree-tops and little black monkeys swing from branch to branch and tree to tree



free and tone-pure as that of giant black-birds in chorus.

These people were quite unspoilt. Our relationship with them was patriarchal and well established by the time I joined the two members of the expedition who had broken into the forest.

Our life on Izamboho (the clearing) was completely isolated as we worked further into the forest for okapi, and we rarely went down to the road. Our days therefore were coloured very largely by the problems and gaieties of the natives around us, and, as I began to differentiate between one member and another of the numerous staff that swarmed about the clearing, their characters and reactions to life took a definite, dramatic shape.

Ellen had written to me before I left home, "I want you to love these people, for if you do they will love you in return, and your life will be strangely enriched". And so I found it.

Among the acquaintances and friends I made, I could number only one woman, and

with her any intercourse consisted largely of smiles and a condition of mutual understanding. The women seemed to take much less interest in the doings of the white household in their midst than did the men. A shy smile, a cry of "*Yambo, Yambo*" from a safe distance satisfied most of them.

At first I thought them a degraded section of the community, but quickly learned that though certain menial duties were naturally theirs, they had the same power over the happiness and well-being of their menfolk as the females of any other community.

With the men, wiping out the word 'native' in so far as it means 'different', I found in those I came to know, wisdom, humour, faithfulness, shrewdness, independence of thought and standard, and great receptivity to good and to new ideas.

They manifested the innate childlikeness of primitive characters, but, in spite of the natural good manners which allowed only points of contact to emerge in our association,



H. M. Rolleston

(Above) Pontoon bridge over the Epulu River. These African ferrymen are discussing with deep gurgles of enjoyment the abduction of a fellow villager's wife by a neighbour—too absorbed to be much interested in the author's party who have called the ferry and now impatiently toot their horn and wait. (Opposite) A Bangina, variety of the bongo, which the expedition finally captured alive and brought to Europe. The young specimens are graceful, and friendly in captivity

I believe that they lived a life rich and varied among themselves, completely diverse from ours and unbridgeably remote.

Our tribe, when the Bwana and Ellen had found them, wore only a strip of bark cloth apiece. Now, after nearly a year's wage earning, the black Rodinesque torsos were often covered with a cheap cotton shirt—a matter for regret—but which seemed to them the first step on the road to a higher standard of living. However, the exigencies of finding food, house, Government tax and, above all, the endless work of paying for their wives, led to much selling and exchange of garments, and the worst would sometimes disappear.

To quote Kommando, when the Bwana, proposing to enlarge the workman's quarters, asked how much one house would cost, "Well, mine cost me my shirt".

Kommando was an interesting character, a peasant with all the peasants' clumsiness, shrewdness, merriment and intense interest in the affairs of others. 'Old Nosy' the Bwana called him, for if you attempted to open a parcel in peace, Kommando would be found at your elbow, saying with the delicious shy grin of a child, "*Taka ona*" (want to see). Nevertheless if accurate information was needed on any matter which least concerned him, Kommando was invaluable.

We were due one day to start for the road, but the kitchen *toto* (in this case it means 'tweeny') was in the act of leaving our service, and I found the Bwana on the verandah unravelling the endless complications of his accounts, for the *toto* was a capitalist, and had lent money to half the clearing. For wages each boy has a book and generally makes his master his banker until a reckoning time of some sort is reached, and then as a rule hours of disentangling are necessary.

At this particular moment Kommando had been called to remind the *toto* of expenditure in Kampala two months before. He knew everything the *toto* had spent there, and moreover all that he had lent and borrowed, and neither the *toto* nor any other dreamed of disputing his accuracy. There followed the affair of a wide-awake hat which, having been presented to the *toto* by a departing guest, had been sold by him to the gardener for five francs. I called this man the Dancing Master as his steps were so consciously light. Now, though the transaction was months old, he did not feel inclined to hand out five francs, and said the *toto* might have his hat again.

"No", said the Bwana, "that would not be right, you have been wearing it"; and defeated for the moment in finding "all this time" in Swahili used the expression "every day".

"No", said the Dancing Master, serious and accurate, "not every day, only every other week." Evidently it was hired out to someone else on the alternate weeks, and we noticed that the Dancing Master was more cheerful in the week he wore the hat.

A financial compromise was finally agreed upon, and the Bwana turned to the *toto* asking, "Now does anyone else owe you money?"

"Only you, Bwana", was the reply.

* * *

N'meszi when we arrived possessed part of a sarang only, which, as his job was water carrying, was quite appropriate. He also sported a shock of hair which though becoming was not the fashion in the village.

Christmas came, with its presents to the household staff, and one morning, hearing some music we looked out and saw N'meszi coming up the clearing in a newly washed and draped sarang, over which he wore an orange and blue striped jersey, and on his head the famous felt hat. Behind him

A. Gatti





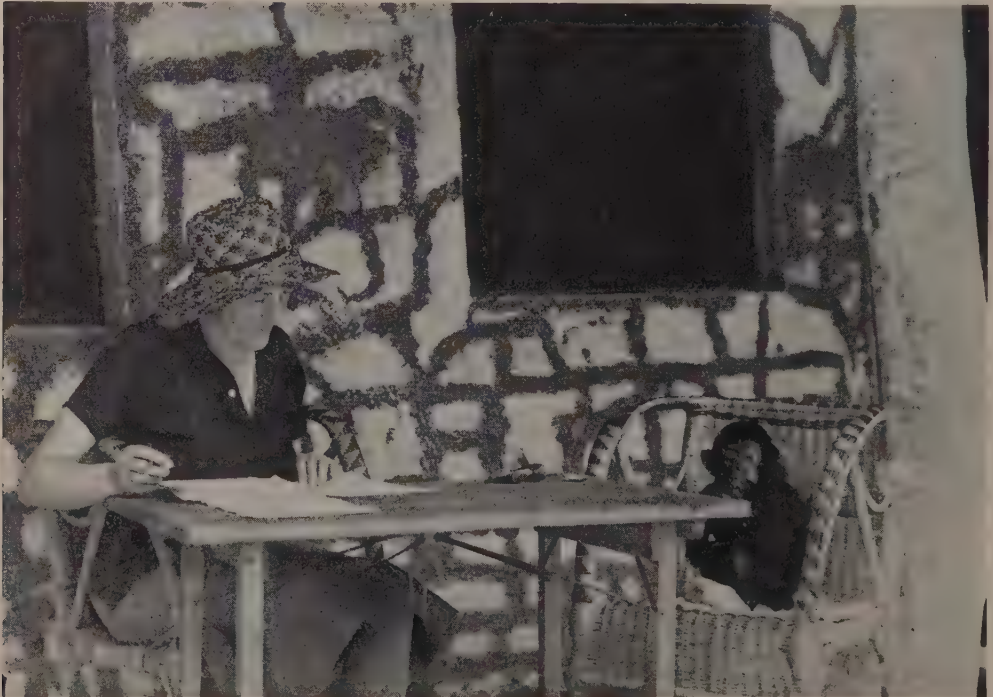
H. M. Rolleston



H. M. Rolleston

Sikumberi village (top), broken down, scattered and rather charming, the huts thatched with silvery banana leaves. The people are prosperous. The woman nursing her baby (middle) is in morning dress more elaborate than that of her contemporaries in Kalume. Her beads are ivory. She is well nourished: many villagers further south are not.

'Crapotti' (little hard head), a chimpanzee whose mother had been killed by the pygmies, with the author (bottom). Expressing all emotions but gaiety he greeted discipline with outbursts of passion in which he beat his breast and stamped his feet. He showed no desire to return to his family in the forest, who cried with unearthly clamour before dawn. He played the sentimental baby to the whites, preferring them to the native boys with whom he showed himself an evil little gamin. He was about the size of a 10-months child and was judged by the author to be some 2 years old



A. Gatti

making incidental music on a hand harp, walked a toto, the customary escort to one whose social status is considerable.

Having circulated the clearing, the house staff turning out to view, he halted opposite the Bwana's window, and removing the hat demanded the scissors of Madame.

"Scissors of Madame, hell", exploded the Bwana. "What for?"

"To cut my hair", said N'meszi simply, indicating the tangle.

"You gotta hope", remarked the Bwana, "and where did you get that jersey?"

"From the cook for twenty francs", replied N'meszi with pride.

"Hi! M'pishy", shouted the Bwana across the clearing, "why do you sell the jersey I gave you for Christmas?"

The cook was a newcomer from Uganda, and his head had already disappeared from the bunch outside the kitchen who were watching the scene. Now confused sounds arose from behind the group, which the Bwana did not press to have clarified.

"Well clear out now, and don't be such a fool", said he finally, and N'meszi retired to see if he could get a haircut in the kitchen, but, being cowardly, they refused, thinking perhaps the matter had not gone down well at headquarters and he left the clearing crestfallen, walking *behind* his escort who played no incidental music!

But lo! in the evening he returned in all seriousness, with a recalcitrant wife who refused to cook his food; she maintained that he beat her "too much", he retorted that she had called him *Mambuti* (pygmy). I had not known that this could be a cause for divorce, but N'meszi advanced it together with more usual reasons. The battle raged for nearly an hour, the lady being defended by her brother who said she must go back to her father.

Inwardly I sympathized with her, she stood with such magnificent defiance, poised on one foot, the other crossed lightly at the ankle, clad simply in a string over the hips, from which depended the briefest of dusters back and front. Occasionally she hurled a flood of words at the kitchen audience, as usual in attendance.

The Bwana finally decided that she should return to her father, a decision which involves the return of the 'bride price'. Four years ago she had cost four goats and twenty francs, the return of which N'meszi now demanded in full. However, the Bwana refused to allow the francs, observing that she must have been worth five francs a year.

"*Ndio, Ndio*", chimed in Kapallalo from behind, and the Bwana knew his decision

had been sound.

"When I am wondering what on earth I have said after one of these *matatas* (rows) and I hear Kapallalo saying '*Ndio*' behind me, I know I am all right", he said once after a very complicated affair. For indeed these decisions were important. Difficulties which to the western mind seem preposterous, have to be met with infinite tact and sympathy on the level of the people's understanding, for any attempt to force a standard beyond their comprehension will drive them away with a sense of being misunderstood, and confidence thus lost is not easily regained.

To return to Kapallalo, we called him the Comptroller, for though his position was not exalted there radiated from him a dignity and natural importance that made the nature of his labours quite secondary to himself, and it was he who counted when any matter of conduct was up. He was a character completely trustworthy, utterly devoted to duty with an alertness to find work that was unique in that tribe whose principal idea was to relax. He was more like 'Uncle Tom' than any of the others, though devoid of ordinary religious feeling. His smile was of great sweetness and without humour. Among these people quick to understand a joke, the Bwana said ruefully, "I cannot pull his leg, I have not the heart". It would indeed have been unforgivable to puzzle that earnest anxious thought.

I shall always see him when I think of the clearing; with absorbed face ticking off on his fingers the points of instructions given him as he repeated them aloud; stopping a toto with too heavy a load and taking it himself; running with desperate speed in answer to Ellen's call, and perhaps clearest of all a look and smile I saw him give a friend who had come to the verandah labouring under a false accusation. In this savage, only just emerged from cannibalism, wearing clothes for the first time in his life, were the elements of a perfect Christian character.

The clearing must be quite overgrown now, there can be no trace of Ellen's garden, or the mud house thatched with grass. Perhaps a wild strawberry carried to an open space by a bird may surprise a botanist years hence, who thinks he is on virgin soil. But I think the trace of the expedition to survive longest will be the corrupted English and Italian words which entered the language as names for objects hitherto unknown. One word was taken up perfectly—the Bwana's favourite epithet of derision: *Cogorita* (little Cockatoo).

What will a philologist of the future make of that?

Grass

In Landscape and Husbandry

by SIR JOHN RUSSELL, D.Sc., F.R.S.

The author's knowledge of soil science and the art and theory of farming is probably unrivalled. In addition to thirty years as Director of Rothamsted Experimental Station in Hertfordshire, he has studied agricultural problems in many parts of the world. Our readers will remember him as the author of an article on Collective Farming in the U.S.S.R. which appeared in these pages in December 1941

THE word grass is used in different ways by different people: botanists restrict it to a particular group of plants, while agriculturists use it much more widely and loosely to denote the mixed herbage on land which carries a good deal of true grass, but also a considerable amount of other plants. In this article the word is used in its agricultural sense.

There is a very large number of grasses and one of their most striking characteristics is the wide range of tolerance of environmental conditions shown by the different species: wider than for any other group of plants used

in agriculture. One thing, however, they will not tolerate: competition for light with big plants; and this is an important factor in determining the distribution of grass-land in natural conditions, and the permanence of grass-land in farm conditions.

NATURAL GRASS REGIONS AND THEIR ORIGIN

This inability to tolerate competition for light explains why grass regions do not develop if forest growth is possible. In natural conditions, regions favourable for the growth of trees carry little grass except in open



Sir John Russell

Great continental areas show clearly the dominating effect of rainfall and evaporation on natural vegetation. Under moist conditions forests develop and grass is crowded out: the Ziguli mountains on the Volga, which lie in the moist region

glades or clearings where for one reason or another trees are not growing. In all other ways some or other of the many grasses have a wider tolerance than trees and they will flourish in conditions where tree growth is impossible. In temperate climates a rainfall of twenty inches or more is commonly necessary for forest growth, but grass grows with as little as fifteen or sixteen inches. The grass regions are therefore those which lie between the forest and the semi-arid regions of drought-resistant plants.

These different regions are clearly seen in the U.S.S.R. where climatic conditions vary regularly and cover a wide range. The northern part below the Arctic Circle is forest: largely coniferous trees and birch. The rainfall is not particularly high; it is usually only about twenty to twenty-four inches per annum, but evaporation is low and conditions suit coniferous trees very well. The summers are too short and the winters too severe for deciduous trees.

Further south and south-east the summers are longer and deciduous trees occur in larger proportion. But the rainfall steadily decreases, and in the region where it is below about eighteen inches per annum trees have

more difficulty in establishing themselves and so considerable breaks in the forest occur.

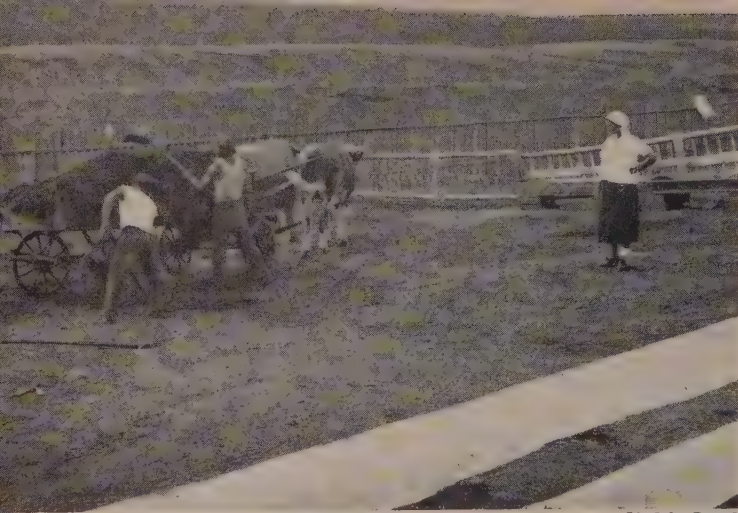
This belt of country begins at the west end of the Black Sea, and striking north-eastwards reaches the Volga somewhere about Gorki. A number of grasses and other herbaceous plants grow in these conditions, and a mixed park-like type of country arises, a mingling of trees and grass-land. It is relatively easy country for the agriculturist. The rainfall usually suffices for agriculture and the trees are not too numerous to make clearing prohibitive, and so it tends to become settled and then of course the trees begin to go. As one goes further south and south-east the rainfall becomes less and the evaporation higher: it is difficult for trees to grow except in hollows or valleys, but a whole range of grasses can grow, especially the variegated grasses, *Stipa*, etc. This is the steppe: and as it is devoid of hills of any size it forms open, rolling country but covered with grass and other herbage.

Going still further to the south-east the rainfall becomes still less, the grass becomes sparser; another lot of varieties, more wiry and drought-resistant, come in; other drought-resistant shrubs also appear, and while the general landscape does not change much



Sir John Russell

Further south under drier conditions trees do not readily grow and as one dies a new one does not easily establish itself. So a park-like intermingling of grass and trees develops



Sir John Russell

Under still drier conditions trees can grow only in low-lying sheltered positions. But if the rainfall exceeds about 13 inches grass can still thrive. This gives rise to the fertile, featureless steppe, well suited to large-scale cultivation, in which the Karl Liebknecht Collective Farm, in the Odessa District, is situated



Sir John Russell

When the rainfall is less than about 40 inches the steppe or prairie vegetation fails to grow well and is replaced by more drought-resistant plants. As the moisture decreases the vegetation cover becomes broken and the plants occur only in tufts, as in the Mojave Desert, Western U.S. (Opposite) Terracing to conserve soil when grass cover is removed: vineyards in the port-wine country, Douro Valley, Portugal

there is considerable alteration in detail. It is typical of arid and semi-arid regions that the vegetation, instead of forming a continuous cover, appears only in isolated clumps, probably starting on the little piles of fine earth thrown out by ants: these little heaps make a good bed for any seed that may happen to alight there. In between these clumps the ground is bare and the hot strong winds blow away the fine top soil and leave only a hard polished surface. Going still further south-eastwards and eastwards the rainfall becomes progressively lower till finally the desert is reached.

This same sequence is seen in other continental areas with similar ranges of temperature and rainfall: the forest merges into park or savannah country; this into steppe, prairie or pampas; and this finally into desert.

THE SOILS OF THE GRASS REGION

The grass belt shows considerable differences in passing from the moister to the drier

sections. There are clear transitions in vegetation determined by the degree of tolerance of drought of the different plants. But there are equally distinct transitions in the soils, which, however, one can see only by digging down to a depth of some five or six feet. On the moister side of the grass belt the grass roots are able to penetrate deeply into the soil unless there is some hindrance, and when they die they leave a residue of black humus material. This does not accumulate indefinitely; formation of the humus just about keeps pace with its destruction by micro-organisms. Over a considerable part of the Russian steppe the mineral part of the soil is loess, a fine air-borne dust free from stones, which offers no hindrance to the penetration of the grass roots; here, therefore, the formation of the black humus has extended as far as the roots could go: in favourable conditions it may be some five feet deep. As one crosses the steppe to successively drier belts the grass roots become progressively shallower and the



Alvao, Lisbon

black earth thins out; finally it ceases. The changes can be seen about Saratov, and this indicates roughly the width of the black earth belt. Further east the soils are grey, quite different in character from those found under grass. This black material contains the elements of plant food and so confers considerable fertility on the soil.

When there have been no complicating secondary actions a typical profile of a deep black earth shows but little change through the black layer. The soil easily crumbles into granules; towards the bottom of the layer there are occasional white patches (called in Russian 'white eyes') where calcium carbonate has crystallized out of the soil moisture; lower still, in the light-coloured subsoil, are larger roundish black patches, former burrows of rodents now filled in with black earth from above. This simple uncomplicated black earth is called 'chernozem'.

Frequently, however, there are complica-

tions due to leaching (percolation) of the soil by rain or floods. In that case the surface soil is no longer entirely granular but shows signs of lamination or layering; a little below the surface the subsoil is hard, and on drying it tends to break up into angular lumps about the size of nuts: not infrequently these show a white coating of silica. These differences become important when the soils come into agricultural use because these 'degraded black earths' lack the high value of the true chernozem; they are, however, probably more widely distributed; one finds them in the U.S.S.R., in Canada, the United States and Australia.

A further complication arises when salts are present, as commonly happens in arid regions. Rain or flood water is liable to dissolve the salts, carrying them through the soil where they may bring about chemical changes as they go: they may finally appear at or near the surface in the

lower lying places where they may kill all vegetation.

GRASS AS A STABILIZER

The beneficial effect of grass in protecting the soil against loss by rain or wind is well known. It is more far-reaching than the mere mechanical protection afforded by a vegetation cover. In some way not understood the roots have the property of agglutinating the fine mineral particles of the soil into crumbs. Clover roots have a similar action; also other plants can do it, but none, so far as is known, to the same extent. Grass and clover stand out apparently supreme as crumb builders. The effect is produced on all soils containing much fine mineral matter. It is extremely important in determining soil stability: the original fine dust is easily blown or washed away but the crumbs are not. The grass therefore gives to the soil the double protection against wind and rain: the mechanical protection that any other vegetation cover would afford; and this agglutination of the particles that few other plants could bring about.

UTILIZATION OF NATURAL GRASS-LANDS

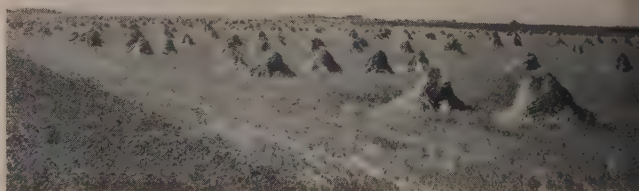
The simplest way of utilizing the natural grass is by the grazing of animals, and this method is commonly adopted in the drier sections of the grass region. Sheep and cattle are both suitable; the choice turns on the supply of drinking-water; cattle want more than sheep. In the dry grass areas of Australia sheep are found most suitable, and the Merino breed is chosen because it tolerates dry conditions and gives high-quality wool. In Canada and the Argentine cattle are more convenient. In the U.S.S.R. sheep are used in some regions but cattle where a river is

near enough to allow of watering. The grazing is very simple, entirely different from the more elaborate system of humid climates, and is properly denoted by the Spanish-American word 'ranching'.

The moister parts of the grass region where the annual rainfall exceeds fifteen or sixteen inches are admirably suited to grain production and in all continental regions are largely used for this purpose. Wheat is the most profitable crop, and wheat breeders have vigorously produced a stream of new varieties to suit particular conditions, so that each important region now has its own special sorts. The chief technical difficulty, which is not yet fully overcome, is to conserve soil moisture: ordinarily there is not enough to allow grain crops to be taken annually, and periodical fallows are necessary. During the second half of the 19th century the prairies of North America became very popular for settlement, and owing to a faulty theory of soil physics farmers were encouraged to cultivate frequently with disc harrows. The natural grass was ploughed in, wheat was sown; after harvest the straw was burnt as quickly as possible to get it out of the way; then the land was cultivated, if necessary fallowed, and sown again. Things went well for some years and then the soil began to blow about. Removal of the grass cover had destroyed the mechanical protection against wind. But there was a more subtle change. Gradually the organic matter of the soil oxidized away and as no grass was ever sown, nor was it allowed to sow itself, there was no renewal of organic matter. The conditions that had held the soil crumbs together therefore disappeared, and the crumbs fell down to dust which was either blown or washed away. Soil erosion began in real earnest and it was



Canadian Government Bureau



Rosethorn, Saskatchewan

some time before men realized that the cause was destruction of the grass. Once this was put back recovery could begin.

PROTECTED GRASS AREAS

In regions of higher rainfall the grass will not usually survive unaided; it must always be protected against the competition of trees. This is usually done by grazing sheep and cattle, and if the grazing is heavy enough neither trees nor shrubs can survive; grass, however, stands up well to grazing and so develops extensively. Before the war many of our grass fields were under-grazed and in consequence gradually became covered with bushes and trees, the result of seeds dropped by birds or suckers sent out by elm trees from a neighbouring hedge. An illuminating experiment was made at Rothamsted to discover how long it would take for forest to reassert itself. A piece of land was fenced off in 1886 and left completely untouched; by 1900 it was already a thicket and by 1920 a dense wood. But for the constant fight waged

against the encroaching trees it would not take long for most of Great Britain to go back to forest.

There are, however, some regions of Great Britain where native trees cannot easily establish themselves: the heaths of the Eastern Counties, the open downs of the Southern Counties, and the wind-swept stretches of high and wet peat lands of the north and west. In all these a mixed vegetation of grass and other herbaceous plants developed and requires little protection, except against over-grazing by rabbits or farm animals.

GRASS AND SOIL FERTILITY

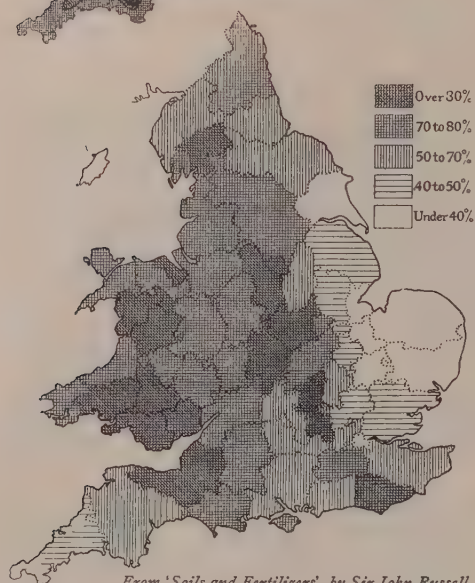
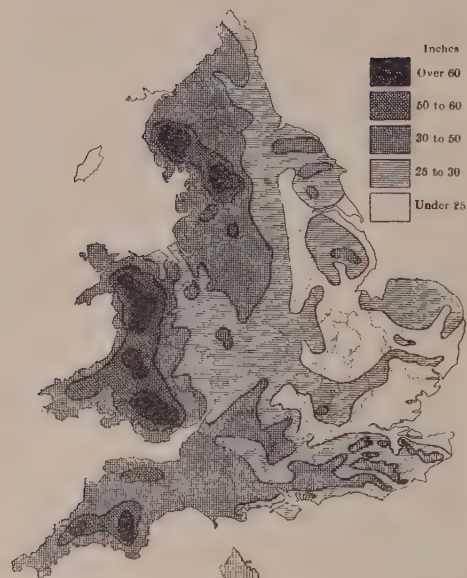
Grass improves the quality of the soil in several ways. Reference has already been made to the enrichment in organic matter and the formation of crumbs, both of which are entirely beneficial. Another effect is of great importance. Over most parts of the British Islands the rainfall is high enough to wash out plant food from the soil. So long as

Utilization of protected grass-land in E. Canada: dairy husbandry near Ottawa (opposite, left); (right) in the W. Canada prairies grass is replaced by its botanical relatives, wheat and oats. (Right) The grass region of Saskatchewan: a source of drinking-water allows dairy cattle to be kept. (Below) Local experiment station, dry grass region, Beaverlodge, Alberta



Dominion Experimental Station, Scott, Saskatchewan





From 'Soils and Fertilisers', by Sir John Russell.
(Cambridge University Press)

(Top) Rainfall map of England and Wales: the eastern region has in general an annual rainfall of less than 30 in. and the western region, apart from the centre, more. (Bottom) Proportion of cultivated land under grass. The drier eastern region has less grass, and therefore more arable, than the wetter western regions

the native deciduous forest remained intact the loss was very limited. The humus formed from the falling leaves and the decay of the undergrowth held up the rain water so that it only slowly percolated. Much of the plant

food that did get washed out of the surface soil was taken up by the tree roots and brought back again to the soil when the next lot of leaves fell in autumn. So the deciduous forest tended to conserve the soil without, however, enriching it. Coniferous forest does not do this, at least not so effectively. The leaves do not fall in such quantity, nor do they yield a good humus, or liberate much plant food on decomposition; in consequence the soil under coniferous forest tends to become acid and poor; some of the soluble material washed out from the surface soil layers is precipitated lower down to form a 'pan'. This also is liable to happen on sandy soils, but not on chalk or limestone soils as there some modification is caused by the calcium carbonate present.

Grass considerably reduces the amount of percolation: in a Hertfordshire soil-gauge well-mown turf reduced the winter drainage by twenty-five per cent and the summer drainage by fifty per cent. Fully growing grass would probably have a larger effect. Grass, therefore, reduces the washing-out of the plant food, and still more reduces the loss, for a considerable part of what is washed out is taken up again by its roots.

PROTECTED GRASS-LAND

The utilization of protected grass-lands as practised in Great Britain is on the same lines as that of the natural grass-land except that the procedure is reversed. Owing to the higher rainfall it is the drier sections of the grass-land that are converted to arable use where necessary, while the wetter sections usually remain in grass because of the difficulties of cultivating wet land and the restricted range of cropping.

The technical differences between the utilization of natural and protected grass-lands are considerable. The grass of course still remains entirely animal food; not even the peasants' ingenuity has found any way of turning it into human food, and disastrous results have followed attempts to eat it in times of famine. The unsuitable factor is the large amount of fibre, present. Recently, however, methods have been devised for separating the protein and it has been shown to be of high nutritive value for human beings: if therefore the occasion should arise it could be utilized.

In no branch of agriculture has there been, in the past, a wider range of variation than in the utilization of the grass-land. Some of the high-lying grass-land has been simply ranched, but the lower ground has been much more intensively managed. Farmers have not been content with the wild grasses that



Canadian Experimental Farms

Grazing represses some species and encourages others. Good farmers have become adept in modifying the herbage by varying the time and intensity of grazing: A, lightly grazed; B and C, more heavily grazed; D, ungrazed

sprang up, but have aimed at producing a definite floral type to yield the maximum of food at the time it is needed. Adaptation to local conditions, power of rapid and copious growth, large proportion of succulent leaf, and low proportion of hard stem are all necessary, and there must also be an adequate proportion of clover to raise the protein content of the herbage. The grasses most suited to the farmers' requirements in Great Britain include rye grass (*Lolium perenne* and *italicum*): cocksfoot (*Dactylis glomerata*), meadow fescue (*Festuca pratensis*), and the best of the clovers include the wild white (*Trifolium repens*) and red clover (*T. pratense*) and others.

Most English pastures contain these plants, but with others less desirable. The different members of the flora compete with one another but they attain a mobile equilibrium which is not much altered so long as conditions remain unchanged. The purpose of grass-land management is so to arrange conditions that desirable plants have a better chance of survival than the others; considerable success has been empirically achieved. Whole treatises have been written on grass-land management: only one or two

examples can be given here.

The desirable grasses are usually deep-rooted and are therefore at a disadvantage in water-logged conditions which favour undesirable shallow-rooting grasses like agrostis, but they can develop much more freely after drainage. This therefore is a first essential in grass-land improvement. So also good species will not tolerate soil acidity or deficiency in phosphate: liming and phosphatic manuring are therefore essential. Remarkable changes in the flora can be brought about by differences in grazing management. Heavy grazing in winter depresses the useful plants and gives an advantage to surface weeds; these, however, are repressed when the grass is given a chance to grow. Under good management grazing is therefore not continuous but intermittent; a field is grazed for some days and then left for a time to rest: this necessitates breaking up the larger fields into paddocks. The animals themselves also modify the flora; bullocks graze with a scything motion of the tongue and so tend to leave the short-growing plants; sheep, on the other hand, nibble and so tend to leave the tall-growing plants.



Sir John Russell

Cahn Hill Farm, Cardiganshire, where hill grass-land is being improved under Sir George Stapledon's direction. The light-coloured areas have been ploughed and re-seeded; the animals prefer the new vegetation to the old

The introduction of modern tractors and cultivating implements have made possible a much more rapid method of improvement: ploughing up grass-land and re-seeding it with a mixture of specially selected strains. In war conditions this is proving very effective, and much derelict rough grass-land has been reclaimed.

The animal industry associated with grass is effectively, and some indeed would say best, carried out by small farmers. This is perhaps contrary to expectation from economic theory, and there are examples of large live-stock farms successfully managed. But the average live-stock farm is small and remains so; it apparently possesses greater economic stability than the large farm. In the moister grass-land regions therefore holdings tend to be small and widely scattered.

There are, however, exceptions in hill

regions where farms are larger because much of the land is of the nature of rough grazing. The drier sections of the grass regions are so well suited to arable cultivation that most of the cultivated land there is so used and in consequence holdings become larger. A line running from Berwick-on-Tweed to the Isle of Wight roughly divides the country into an eastern part with rainfall under thirty inches per annum, and a western part mainly with rainfall over thirty inches but with a drier area in its centre. In the eastern part arable land predominates more and more as one moves eastwards into successively drier regions. When the rainfall is below twenty-four inches the natural grasses are narrow-leaved and wiry and of little agricultural value; it is difficult to establish the quick-growing wide-leaved grasses desired by the farmers. But in the intervening zone

of twenty-five to thirty-five inches of rain these grasses will grow and arable farming can also be practised; mixed husbandry has accordingly been developed in which the land lies for some years in grass and is then ploughed out and put into arable crops.

WAR-TIME PLOUGHING POLICY

Before the war our agriculture was mainly directed to live-stock production; no less than seventy per cent of the value of the total output was represented by animal products, in consequence some two-thirds of our cultivated land was in grass. During the war food crops for human beings have become more important; much of the grass-land has had to be ploughed up and the struggle against encroachment by wood has been resumed, this time with the aid of the tractor, the bulldozer, and, when necessary, explosives.

During the period when the land was in grass it was protected against serious loss of fertility, though only when the growth of grass and clover had been vigorous was there any important accumulation of fertility. This was the exception. Much of the grass-land was acid and deficient in lime and phosphates: these deficiencies were more obvious and therefore more often remedied for arable crops than for grass—another result of the wide range of tolerance of the different species of grasses. Once they were put right, however, the organic matter left by the grass roots contributed to the productiveness of the soil. Another difficulty was that the grass-land had harboured numerous insects, particularly wire-worms (*Agriotes*) and while these had not seriously damaged the grass they were very destructive to wheat crops. No entirely satisfactory way of coping with this trouble has been found, but various mitigating devices, such as rolling, are practised.

It seems improbable that in Great Britain the continued cropping of the former grass-land would lead to soil erosion on a scale comparable with what has happened in the arid regions. A vegetation cover of so-called weeds establishes itself so rapidly that much of the farmers' cultivation efforts are directed to its removal. But the other advantages of periodical grass crops remain, especially the accumulation of valuable humus and the building-up of soil crumbs.

The matter in any case is largely academic because our farmers will get back to a live-stock agriculture as quickly as possible after the war, and this will necessitate an increase in our area of grass. An important question will be whether the grass shall be segregated

in permanent grass fields while other land remains mainly arable, as before the war, or whether grass and arable cropping shall alternate on the same land. To a considerable extent this will solve itself. The old difficulty of establishing grass under a rainfall of less than about twenty-four inches of rain still persists and these sections of the country will therefore presumably remain arable: while the cost of cultivating heavy clay soils when the rainfall is much above thirty inches will tend to keep them in grass even though they may be periodically broken up and re-seeded. But in between these limiting cases are great areas of land where alternate grass and arable husbandry can be practised, and after the war we may expect to find the distinction between grass and arable land in England and Wales less sharp than in the past and more of the interchange that has long been practised in the north and west of these Islands.



Peter Ray, from Paul Popper

Prince Rupert's Campaign of 1644

A Civil War Tercentenary

by C. V. WEDGWOOD

In June of last year we published an article by Miss Wedgwood on the background and strategy of the Civil Wars of England. In this article she tells the story of the Northern Campaign which ended, three hundred years ago this month, in the rout of Prince Rupert's Royalist forces at the Battle of Marston Moor



THE wars fought in England have not as a rule a very interesting strategy. Scotland, with its long tradition of guerilla fighters, produced a number of remarkable strategists; not so England where the fighting is so strongly tinged with political considerations that the lie of the land is secondary—grand strategy rather than land strategy emerge from the perplexed tale of the baronial struggles or the Wars of the Roses.

One strategist, however, does stand out in the Civil War. Rupert of the Rhine, as he was romantically and not very correctly styled by contemporaries, was not one of the great soldiers of the world, but he was distinguished and unusual. The fascination of his campaigns to the amateur of military theory in this country is that they lie over well-known ground and exploit the small, familiar features of the English landscape.

A certain element of luck is discernible in the careers of all great soldiers; it is an element dismally lacking in Rupert's: his skilful and daring relief of York—just three hundred years ago this month—ended in total disaster at Marston Moor.

The painful warrior, famous for fight
After a thousand victories once foiled,
Is from the book of honour razed quite
And all the rest forgot for which he toiled.

The First Civil War (1642-46) was Rupert's first heavy task, too heavy in fact for his youth and inexperience though he proved on the King's side so much the outstanding soldier that in the end he shouldered the whole weight of responsibility. Yet he was twenty-two when he landed at Tyne-mouth in August 1642, in response to King Charles's appeal for help against Parliament, with a skeleton staff of professional soldiers and a little artillery. He was twenty-six when after the King's defeat he sailed for France to take up a command in the French army.

Born in 1619 at Prague, the third son of King Charles's sister, the lovely Elizabeth of Bohemia, he had been brought up in the Hague at the impoverished exiled court of his parents. His father, a gentle little creature, Elector Palatine of the Rhine, had been chosen King by the Protestant rebels of Bohemia and had lost both his new-gained crown and his own lands on the Rhine by the

(Opposite) Prince Rupert aged 17 from a portrait by Homthorst, court painter to the Prince's mother, Elizabeth of Bohemia. Rupert distinguished himself not only as a brilliant cavalry soldier, but as the commander of a fleet, the inventor of chemical compounds, and an artist and connoisseur. It was he who introduced mezzotints into England



time Rupert was a year old. The career of a professional soldier was thus the only one open to this penniless scion of a dispossessed family. Of cosmopolitan lineage, first cousin on his father's side to Marshal Turenne, great-nephew to that remarkable soldier Maurice of Nassau, and great-grandson of William the Silent, the liberator of the Netherlands, Rupert had examples enough to follow. At thirteen he was serving in the Dutch Lifeguards, at eighteen taken prisoner in a German skirmish, he was released only in time to accept his uncle's offer of a command in England.

He came over knowing very little of this country except the district round London where he had hunted on an earlier visit to his uncle's Court. He was a tall, slender, saturnine young man, embittered by a long lonely imprisonment, looking much older than his years, bad-tempered, too much on the look-out for slights, but extremely quick-witted, energetic, and daring, fundamentally loyal, an inspiring leader, and, once enlisted as a friend, unchangeable. His faults were those of his breeding, his qualities his own.

His character is not irrelevant to the story of his campaigning, for his character often betrayed his ability, or caused others to betray it. In the great and tragic story of the relief of York and the disaster at Marston, geography is half the picture, psychology the other half.

The campaign for the relief of York began with a letter from the Earl of Newcastle dated March 29, 1644. Newcastle, an elderly courtier, chiefly concerned with the breeding of horses, had been appointed to command in the North by King Charles. He had expended a good deal of money on raising an army, and with the help of George Goring, an able soldier and a disreputable man, could have managed well enough to hold the Parliamentary commander, Sir Thomas Fairfax, in check. But in January 1644 the Scots became the allies of Parliament and sent an army over the border. York, the northern capital, was threatened and Newcastle was caught between two fires. "Could your Highness march this way," he wrote to Rupert, "it would, I hope, put a final end to our troubles."

Could your Highness march this way . . . the thing was easier suggested than done. With forces inferior to those of Parliament, compelled for political and social reasons to disperse small bodies of men in a string of scattered garrisons, and to protect a headquarters at Oxford far out on a salient into enemy country, Rupert's task was not easy. His technique, for maintaining the ticklish position, was ingenious. He had trained an efficient and astonishingly mobile cavalry which darted round Oxford and between the garrisons and kept the Parliamentary forces perpetually guessing.

When Newark, the King's most important strategic fortress in the Midlands, was besieged, Rupert gathered up handfuls of troops from all the garrisons between there and Oxford and flung in enough men to relieve it. This had happened on March 21, 1644, and had given the Earl of Newcastle the idea that Rupert could do the same for him at York. Hence his appeal from

the North on March 29.

The same could certainly not be done for him. It was one thing to denude the Midlands garrisons for forty-eight hours and carry their troops a day's march off on promise of a swift return. It would be quite another to collect a whole army for the North. Nevertheless, Rupert had not the slightest doubt that it must be done. Within a few weeks of Newcastle's appeal York was closely blockaded by the enemy. Somehow Rupert must raise a sufficient force to go to its relief and settle with the Scots and Fairfax. Somehow he must put Oxford in such a posture of defence that he could carry off the greater part of his mobile cavalry to the North.

He spent the whole of April at Shrewsbury recruiting in the valleys of the Welsh border and putting the men through a brief intensive training. At the same time he was corresponding hotly with the King and his Council in Oxford, urging the absolute necessity of his expedition to York—a need which they were very unwilling to admit. It ended by Rupert's throwing discretion to the winds and, with a slender guard, darting across the partly hostile country between Oxford and the Welsh border to carry the argument in person. In person Rupert could usually get his own way, and his whirlwind descent on the Council enforced a reluctant consent. They agreed to his removing the greater part of his remaining cavalry from Oxford and were apparently satisfied with his assurance that they could very well stand on the defensive for the summer while he dealt with the North.

Well pleased with his dispositions, Rupert sped back to Shrewsbury to complete his preparations. On May 16 he marched out of the ancient border city with his newly recruited regiments making a brave show. His first important halting-place was Chester, where he borrowed as large a contingent from the garrison as was deemed safe, and with this addition resumed his northward march. At Knutsford he had a brush with a Parliamentary skirmishing force which he routed; on May 25 he took the Parliamentary garrison city of Stockport by assault. Next he mopped up Bolton, another stronghold, where his troops, getting out of hand with too many victories and incensed because the enemy had hanged one of their prisoners, fell to sacking the town. The first week in June found the advancing army in Wigan, where the people flocked out waving leafy branches, and the children scattered flowers before the feet of the conqueror. Recruits from the whole of Lancashire were now pouring in to swell the



From the author

Contemporary engraving of Thomas Fairfax, Parliamentary General, showing a scar on his face from a wound received at Marston Moor. Humane and self-effacing, this fine soldier is generally under-estimated

ranks of the victorious army. On June 11 Rupert rushed the Parliamentary seaport, Liverpool, but lost the stores of ammunition and fodder on which he had counted, for they had been shipped away as soon as his approach had been rumoured.

The cleaning-up process was now complete, and he turned aside to Latham House, the Earl of Derby's seat, long besieged by the Parliamentarians and long defended by Derby's indomitable French wife. The besiegers had however withdrawn when they heard of the fall of Stockport, and Rupert entered an already liberated fortress. Here he received disturbing news alike from York and Oxford. The Earl of Newcastle wrote that he could not hold out beyond a week. The news from Oxford was worse; not only had the King's Council drawn in the troops from the skeleton wall of garrisons which Rupert had left about the city, but rumour had been poisoning the King's mind against his nephew. His enemies had pointed out

that a royal prince who conquered cities so easily might one day aim at the Crown. "It is indifferent whether Parliament or Prince Rupert prevail," they hinted. Rupert, whatever his failings, was unswervingly loyal and quite without personal ambition. But he had not the self-mastery to disregard these calumnies, all the more so as they might easily affect his plan of action. He hesitated at Latham in the worst of tempers for more than a week, cogitating with the help of maps the best means of relieving York, beset by an army about three times the size of his own, but also cursing the King's advisers in loud and bitter words. No wonder. He heard, among other things, from the dissolute but useful cavalry officer George Goring, that he had been commanded back to Oxford. Goring and his troops, who had been cooperating with Newcastle for most of that year, was absolutely essential to Rupert's northern plans. He cursed the King's Council yet again, and told Goring to disregard the order.



Val Doone

Upper Wharfedale. Prince Rupert's forces entered Wharfedale somewhat south of this point but the picture gives a good impression of the kind of country across which he was moving his troops

On June 22 Rupert left Latham, turning north-east towards Skipton. As he crossed the Yorkshire border Goring with his cavalry joined him. On June 26 the Royalists took Skipton; on the 29th, coming down Wharfedale, Rupert slept at Denton, Sir Thomas Fairfax's own house.

It was with some dismay meanwhile that Fairfax and Leslie, camped about York, heard of the approach of Rupert's swelling army. The young man's reputation had never stood higher; the mere fact that he had got troops together and brought them up to Yorkshire, pulverising the Parliamentary garrisons by the way, was terrifying enough. Yet, even when joined by Goring, Rupert had only about half the numbers of Fairfax and Leslie. They decided, therefore, to challenge his approach, raised the blockade of York and drew out westward to intercept him.

On Sunday, June 30, Rupert had been at Knaresborough. Later in the day Fairfax heard that he had struck north-east to Boroughbridge—evidently attempting to evade the Parliamentary army. Just below Boroughbridge the Swale and Ure join to form the Ouse which runs to the south-east into York, joined a few miles outside the city by the Nidd. The best road ran down the right bank of the Ouse and crossed the Nidd at Skipbridge. This way Rupert must surely come, and here, overlooking Skipbridge, Fairfax kept watch.

But Rupert swung round in a great quarter circle, crossed the Swale and the Ure and shot down on York from the north. A few miles short of the city, at Poppleton, the Parliamentarians had built for their own purposes a bridge of boats; this Goring knew of. Rupert put some of the cavalry over here to deploy in front of the bewildered Fairfax, while his infantry marched down the left bank of the Ouse and camped outside York. Rupert himself with two thousand horse

entered the city late on the evening of Monday, July 1.

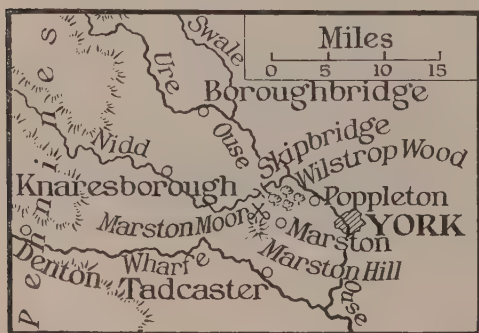
The relief, with hardly a shot fired or a blow exchanged by an army half the size of the besieging force, was brilliant; brilliant as sun before storm. It was indeed a blazing week in that otherwise wet summer of 1644, but the air was thick and still with the storm which was to break—symbolically almost—at six o'clock on the following evening. Distant thunder could perhaps already be heard rumbling on the moors to the west. Distant thunder of another kind was in Rupert's ears.

He had received at some point in the march between Latham and Boroughbridge a letter written by the King and dated from Oxford on June 14. It contained what Charles himself described as "peremptory orders". "If York be lost," he wrote, "I shall esteem my Crown but little less." York was not lost: so far Rupert had done what was expected of him. But there was more to the King's letter. "But if York be relieved, and you beat the rebels' army there, but *otherwise not*, I may possibly make a shift upon the defensive, to spin out time until you come to assist me."

This was an unnerving letter to have from headquarters in Oxford. "I may possibly make a shift . . . but otherwise not." Rupert interpreted it as an order to fight at once. Indeed it was nothing else, for Charles wanted the cavalry back in Oxford as soon as he could get them: and Rupert could not abandon York without settling with the besiegers. Carefully calculated plans for dividing and outwitting his enemies must be sacrificed to speed. Outnumbered two to one, even counting the garrison of York, Rupert saw that he must fight, and immediately.

He had never yet been defeated, he was still only twenty-four, he was pardonably exhilarated by his success in the first part of the campaign. If he fully appreciated the risk that the King had forced him to take, he was also pretty certain that he could win on the odds. This explains the bold face he put on the unwanted battle, a bold face which was taken by his enemies as a sign that the fatal engagement of Marston had been his own especial folly. "My lord," he is reputed to have said to Newcastle on the morning of that terrible action, "I hope we shall have a glorious day." The words sounded mere bragging in the ears of the older man but they expressed a pardonable hope.

The problem of Sunday, June 30, had been how to slip into York without meeting the



IWSP



H. W. F. Taylor



The walls of ancient York are one of its chief glories. In the time of Charles I it was the second city of England and the northern capital: its prestige was nearly as valuable to his cause as its strategic advantages. In the photograph above the Minster is visible in the distance. (Right) Part of the fortifications and the Lendal Bridge over the river Ouse



Rischgitz Studios

An imaginative reconstruction of the battle of Marston Moor depicts the moment, at six in the evening, when the Parliamentarians opened the attack. The scene is behind the Royalist lines where a group of officers are at supper. The Earl of Newcastle, smoking a quiet pipe in his coach—and this is an authentic detail—looks apprehensively forth to see what is happening

twenty-five thousand men of Fairfax and the Scots. The problem of Monday, July 1, was how to meet them to their disadvantage. Rupert poring over the inadequate maps, discussing with his staff and the northern officers the lie of the land round this, to him, strange city, knew that he must somehow break up their overwhelming numbers. His cavalry must again throw dust in the enemy's eyes.

On Tuesday, July 2, therefore, it was reported to Fairfax, lying encamped near the village of Marston to the west of York, that the Royalists were leaving the city south-westwards on the Tadcaster road. Rupert's first deception had succeeded, and the Parliamentarian scouts had taken decoy parties of the Royalist horse for the van of the whole army. Fairfax at once sent the foot and the artillery to head them off, planning to follow in the course of Tuesday afternoon with his cavalry.

Scarcely were the infantry and guns well on their way, than over the flat horizon on the York road troops of cavalry began to appear. Fairfax, drawn up on the slightly rising ground

called Marston Hill, among fields of standing rye and wheat, faced across onto a wide, untidy stretch of waste land, gorse-grown, intersected with shallow ditches and beaten foot tracks, backed on the skyline with the tangled copse called Wilstrop Wood. On this wide common the Royalist cavalry now began to emerge and form up. Within half an hour it was clear that they were no mere reconnoitring party; within an hour Fairfax realized with an anxious heart that the main body of the Royalist army was coming this way. It was noon on a sweltering July day, the air heavy with coming thunder, a sullen sun glaring down on the moors. Thirsty, hungry and discontented, the Parliamentarian troopers stirred restlessly among the wheat fields wondering when the attack would come, and Fairfax sent a scout galloping after the infantry and guns. They must come back at once: should the Prince attack, he would undertake to hold the position until their return, but they must make haste. (They were two hours' march away; he must hold on till two o'clock then, come what might.)



Will F. Taylor

Nothing came. The Royalist cavalry drew up in formation, not a quarter of a mile away, Rupert's colossal banner, black and gold, five yards long, discernible among the crack troops of the right wing, his own regiment of horse. Clink of harness and thudding of hoofs on the dry earth of the moor, the strained expectancy of battle increased by the thunder in the air: but no attack came.

What had happened? Rupert's plan, of which the first part had been achieved so neatly, was failing in its second half. Once Fairfax had been made to divide his forces, Rupert's cue was to march all his army out onto the Moor and attack the unsupported Parliamentarian cavalry. As far as Rupert's own troops were concerned all went well; since the small hours they had been converging on the scene of battle, they were ready in their places by noonday. But the infantry

Dorien Leigh



(Above) *Marston Moor, the site of the battle. Easily reached from York and not much obscured by subsequent agricultural development, it is a favourite pilgrimage for amateurs of military history. (Right) The memorial to the battle is of recent erection, put up largely by the efforts of the Cromwell Association and the Yorkshire Archaeological Association*

in York, the garrison troops on whom he depended for the centre of his battle line, and whose presence alone was to give him decisive superiority over Fairfax, would not leave the city. Newcastle himself sulkily objected to the plan for fighting—his real grievance was the necessity of yielding the supreme command to a mere boy; the troops, tired after the siege and mutinous as usual for lack of pay, stubbornly refused to march. For the whole of the long summer morning, in the increasing heat, Rupert exhorted and harangued, swore and threatened, but not until midday did the infantry obey orders.

The two precious hours—from twelve to two—in which the battle was to have been fought were thus lost. The Parliamentarian foot rejoined Fairfax long before the last of the Royalist infantry reached the field, with Newcastle bringing up the rear in a coach and six.

Fairfax had his full strength available by two in the afternoon, Rupert not until after five. Only one advantage Rupert still had, and that was the terrifying reputation of his cavalry. All the time the last regiments of foot were marching onto the Moor, the opposing Parliamentary army had failed to attack. Fairfax had had some difficulty in marshalling his forces among the hampering knee-high crops, and Rupert took the long delay for a sign that they would not attack that day. He had chosen his position well for defence at least. A long ditch, about two feet deep, divided the arable land from the Moor and ran parallel to both fronts. Rupert brought his front line of cavalry right up to this, having no intention of fighting that night and assuming that the obstacle would deter any Parliamentary attack.

The problem at six o'clock on the evening of July 2 for Rupert was how to extricate himself under cover of night and bring off, at a second attempt, some new manoeuvre for making Fairfax split his forces, since the first plan had broken down. And here Rupert made his great psychological error. For forty-eight hours he had made Fairfax dance to his tune; he forgot that by losing the

opportunity of fighting when his enemy's force was divided he had missed a cue in the merciless game of war. The initiative had passed to the other side. Knowing that the time was over for fighting the battle as he had planned it, he acted as if the time was over for fighting any battle at all. At half-past five he had prayers read at the head of each regiment. It had grown dark with the gathering storm, and although there were three more hours of daylight and a full moon soon to rise, Rupert's experience of the English hitherto was that they never fought late in the day. Towards six he gave the order to break formation and get down to supper.

At that moment Fairfax advanced. The rest of "this perplexed battle", as one historian has called it, has been described too often to need repetition. That, between numbers so uneven, the issue was ever in doubt at all reflects credit on the Prince, in spite of his initial error. His line, flung back all along the front, steadied itself, and on his side of the battle held the opposing forces—Cromwell's Ironsides—for an hour until weight of numbers bore them down. On the further wing, George Goring's, the Royalists even won the tussle with Fairfax's cavalry, but could not be brought to reassemble, and lost the advantage they had gained by a too rash pursuit. In the centre the infantry, robbed at length of all cavalry support, and borne down by foot and guns in front and Cromwell's cavalry on the flank, died doggedly fighting.

In sheer loss of life this was probably the bloodiest battle ever fought on English soil. Of the King's men the dead numbered over five thousand, half the army. Rupert's cavalry were two-thirds destroyed and though he was to build up the regiments again to their former skill, their reputation for invincibility had gone, and with it half their power. The swelling army which a month before had traversed the Lancashire hills in triumph and hope withdrew a broken remnant to the Welsh marches whence it came. The brilliant game had been lost in the last round.

Yemeni Arabs in Britain

by R. B. SERJEANT

SINCE before the last war, Cardiff and South Shields have had their Arab communities: today there are two hundred Arab families in South Shields, nearly every one of which has lost a relative at sea during the present war.

The Yemenis sign on at Aden as stokers or donkeymen in British vessels; some come to Britain, marry English wives, become naturalized and never return to their native land. With the Somalis and Indians they occupy quarters hard by the docks of Cardiff and South Shields; smaller colonies of Yemenis are also to be found in Hull, Liverpool, Birmingham and Sheffield. Their children, alert and intelligent, hardly distinguishable in complexion from their English schoolmates, are carefully brought up in the Moslem faith.

The community is organized in the form of a religious confraternity of the type known as a *tariqa* or 'spiritual path'. The initiate, entitled *faqir*, passes through various grades of spiritual attainment until he reaches that degree of understanding which entitles him to be called *Sufi*, explained by the Arabs as "one who has purified his heart". Few reach the higher grades of 'Guide' (*murshid*) or sheikh. The order to which the Yemenis in this country belong is called the '*Allawi tariqa*', an offshoot from the great Shadhili order spread throughout the Moslem world.

The founder of the '*Allawis*' was a certain North African sheikh named Ahmed ibn Mustafa al-'Allawi, born in the sea-coast town of Mustaghanem in Algiers. Under a sheikh of the Shadhili order he studied the outward form and the inner meaning of knowledge, but on the manifestation of his own saintly powers, his professor placed himself under the '*Allawi*' who then founded the new *tariqa* which is called by his name. Many pupils came to study under him in Algiers, among them 'Abdullah 'Ali al-Hakimi from the town of Dhubhan in Southern Yemen, the first of the saint's pupils to come to England and establish the '*Allawi*' order there. The *tariqa* is now spread throughout the world, more especially in seafaring countries such as Holland where there are probably numbers of Hadhramis from the Dutch East Indies. There may be '*Allawis*' in Paris, for the '*Allawi*' knew French well and visited that city which

has several mosques. Yemenis belonging to this sect were to be found in Marseilles, Rouen and Le Havre before the war.

While the '*Allawi*' community exists primarily for the prosecution of the faith, it has also a social function. The sheikh looks after the sick and, at its own expense, the society sends ill or aged members back to Arabia. A school is maintained in Cardiff, attended by about fifty boys and thirty girls. At the beginning of the war, three Yemeni children by English mothers were sent to study at the famous ancient university of al-Azhar in Cairo, all expenses being borne by the confraternity. *Zawiyas* (oratories) for prayer and meditation are set up wherever a number of '*Allawis*' settle, and an annual festival is held which lasts three days. During the festival there are processions, prayers, addresses, the chanting of *nashids* or praises of God, and the performance of the curious ceremony known as the *dhikr*, or the 'mentioning' of the name of Allah.

I have attended these annual festivals both at South Shields and Cardiff. Amidst the busy docks and the drab grey houses which surround them, cratered at intervals by bombs, you come upon the colour, the costume and the warmth of welcome of Southern Arabia, so that you might be in Aden or one of the little market towns of the interior. I found our friends at a small house in the seafaring quarter of South Shields, easily identified by the numbers of Arab and Somali seamen going in and out. Most wore cap and suit, but some had already changed into bright clothing brought from Arabia. We were taken before Sheikh Hasan Ismail, a rosary in his hand, and clad in white, as befits the spiritual head of the community; for white, they say, is the best of colours. From another room in the building came the sound of chanting, and many little children were to be seen in holiday dress. Everybody was conversing and feasting, though in true Yemeni style the men had assembled apart from the women, who were visible only at a distance; but two, wearing the head veil of Yemen, asked if it were possible to get messages to their sons then serving in the Middle East.



(Left) The ruined mosque of Cardiff after the blitz. (Below) The Arabic schoolmaster and his pupils wearing on their heads the sheep-skin Kalpaks of Yemen. (Right) The restored mosque at Cardiff on the opening day. The muezzin, standing on a ladder, calls to prayer. Among those present are Sheikh Hafiz Wahba, Sa'udi Minister in London







Photographs from the British Council

The younger generation, half Arabs, half English, but British Moslems by citizenship. These children who are bi-lingual may follow the seafaring lives of their fathers or with their natural ingenuity turn to various other trades

From the house we proceeded to the zawiya, a large room in a kind of seamen's lodging-house, carpeted and garnished with lovely Yemen blankets spread side by side with our shoddier machine-made European carpets. Sheikh Hasan was in the centre of a procession, grave, stately and kind, the elders by his side, and the green banners inscribed with the legend *la ilaha illa 'llah* ("There is no God but God"), a white crescent and stars, borne aloft before him. In front came the children, while seamen in European clothing extended along both sides of the entire procession, each holding the hand of his neighbour. As they moved slowly along they chanted 'Allawi nashids with an intense sincerity, watched by the English, who with curiosity and disinterested friendliness were attracted by the novelty of the bright colours in this heavily industrialized area.

On arrival in the building, the various elements of the procession dissolved and a circle was formed in the zawiya for the performance of the dhikr. Those who took part discarded their European clothing to put on the *futa* or coloured cotton skirt, a white shirt, and the turban of their native land. In all, there may have been a hundred men in the circle of the dhikr, with Sheikh Hasan and a singer in the centre. All joined hands and at a motion from the sheikh began to sing or chant '*la ilaha illa 'llah*', at the same time jerking up and down from the knees while the singer intoned, chanting praises of Allah.

At what seemed to be a signal given by the sheikh, those in the circle began to breathe deeply, uttering a respiratory 'ah' in rhythm with the movement of the knees (said to be the 'ah' of the name of God, Allah). Simultaneously the entire circle began to jerk up and down, continuing the action automatically, as if not of their own will. The sheikh and the singer inside the circle remained unaffected by the trance-like state of the dhikr, which lasted perhaps for half an hour until it was stopped by the sheikh and the singer ceased to chant. The action is so vigorous that I consider it nearly impossible for anyone to perform of his own accord. When the sheikh perceives that the participants have had enough, he makes the dhikr stop; were he not to do so, they would continue until they dropped on the ground with exhaustion. One man, indeed, did carry on the spasmodic movements after the others had finished, and had to be patted on the back until he recovered from his ecstatic state. Later in the day there were more dhikrs; and sometimes as many as five or six are performed on these occasions, for as it is said in the mystic lan-

guage, "Mention the name of God until they say that you are mad." Another form of the dhikr as practised by the Mevlevis in Turkey has been described by European travellers who know the sect as the 'Dancing Dervishes'.

Addresses in Arabic followed the dhikr, and then a meal in Arab style, mutton cooked as it is in the Yemen, and rich fatty broth with it. Condiments brought from Arabia mingled richly with the perfumes with which the South Arabs anoint themselves on festival days, and my senses were gladdened with the very smell of that far country. Again the women seemed to have assembled in another room. They had been onlookers only at the procession, and were perhaps celebrating the feast in their own way. It is strange that these English wives should so readily adopt the customs and the manners of the Moslem women of the Yemen, a country where the name of a female relation cannot with propriety be mentioned in the presence of other men. On marriage many, if not all of these women become Moslems; one has learned to read the Koran and study religious books in Arabic, and, even stranger, to perform the dhikr. The strictest Moslem, I am sure, could find nothing to censure in the conduct of these English Moslem women.

In their native land most of the Yemenis are agriculturists, tribesmen, speaking the common language of the country used by nobles and people alike; by contrast their English is the unpolished speech of seafaring folk, and this gives them a strange dual personality. Most curious of all Yemeni customs, however, transplanted into this country, is the chewing of the qat-leaf which stimulates and bemuses, but leaves the eater sleepless and depressed. It is not a dangerous practice and is universal in the Yemen. Within the last year or two a Yemeni discovered that a common English garden shrub possesses similar properties, so they can now obtain as much as they wish, costly though it is in the Yemen. Formerly it was brought to England in powdered form, but the difficulties in obtaining it seem to have inspired this new discovery!

Cardiff town is not unknown in Arabia either, for in the interior of the Aden Protectorate I have more than once met Arabs who had lived there at one time or another. Anyone who would see a small corner of Arabia in England I can only advise to stroll down from Cardiff station to Butetown; by their finer features and slight bodies he will easily distinguish the Yemenis from the polyglot population which contains nationals from all parts of the world.

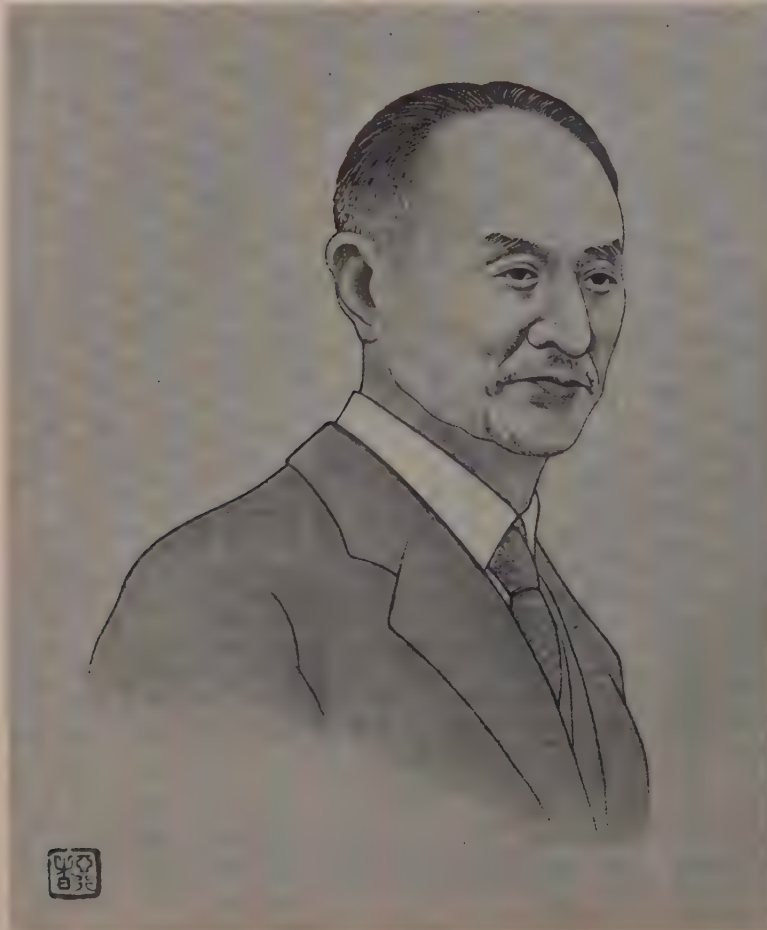
Abroad in London

Embassy Interiors

Of the hundreds of thousands of Londoners who travelled abroad before the war, very few remember that within the boundaries of their own city, perhaps in the next square, a small corner of every foreign country they have visited is to be found. Each Embassy and Legation is legally part of the territory whose government it represents, and behind its doors lies concealed the distinct character and cultural charm of a distant homeland, something of which these pictures set out to reveal



China



*Portrait of the
Chinese Ambassador,
Dr Wellington Koo,
specially drawn for us
by Mr Chiang Yee*



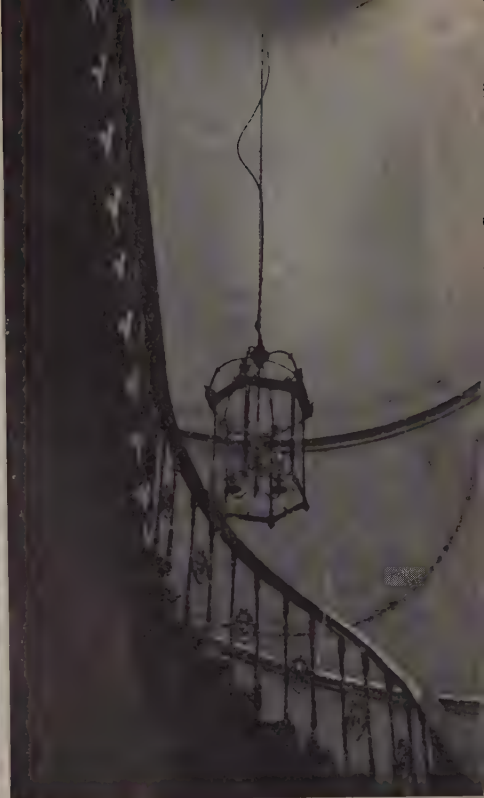
Norway



Oscar Marcus



Holland



Bill Brandt





Bill Brandt

Spain





WEDGWOOD PHOTO BY Bill Brandt

Peru





Egypt

*Sketch of the Egyptian Ambassador, Dr Hassan
Nihat Pasha, drawn for us by Miss Iglal Hafez*



The Structure of the Past

V. Rome

by R. W. MOORE

It is difficult for us today, whose whole edifice of western civilization is based on the Roman achievement, to realize how remarkable the phenomenon was, in the larger perspective of world history, by which a small Italian village became the centre of a huge empire. Mr R. W. Moore, Head Master of Harrow, and author of The Roman Commonwealth, in this fifth article of our series, describes the steps in that development and shows how Rome was eventually the medium through which the legacy of classical Greece (to which we shall return in a later article) and the religious inspiration of Christianity were diffused throughout the Mediterranean orbit and as far north as our own islands

IF Mesopotamia and the Nile Valley are the cradles of western civilization, the Mediterranean may be said to be its nursery. The geographical logic which made these river valleys and the 'fertile crescent' centres of world history for centuries can be seen at work behind the story of the Mediterranean peoples. The Mediterranean was by nature destined to be a historical unit. In the first place the Mediterranean is not so much a sea as a large inland lake. It has no tides; it has no vast unknown reaches, or perils such as face the ocean-goer. There are plenty of harbours and plenty of fish, a fair supply of timber for shipbuilding and a comparative scarcity of metals, a condition, writes Professor Holland Rose, which tempted man to make longer and longer voyages in search of ornaments for his women, tools for farm work and weapons for war. It seems to have been made rather for bringing peoples into contact with one another than for keeping them apart. The Mediterranean lands have a good and fairly uniform climate. On the threshold of history they were sought after by peoples travelling from regions where life was harder.

If the Mediterranean was destined to be a historical unit, it needed the military and administrative genius of Rome, the village that became a city, the city that became a world, before that destiny could be realized. Of all the land masses which obtrude themselves into this great lake Italy is the most central and the most fit for the domination of the whole area. Inside Italy it would be hard to find a site more suitable for a capital city than that enjoyed by Rome since its foundation. If one centre was to control the whole of the Mediterranean area it could not be better situated than on the site of Rome.

Italy by reason of its mountain configuration looks west, and Rome is on that side. Rome is situated centrally in the peninsula and is, therefore, in a good position to dominate Italy equally to north and to south. It is situated on the only important river which flows down to the western coast of Italy, indeed the only considerable river south of the Po, and is situated up that river sufficiently far to be out of range from the coastal raiders who infested the Mediterranean in early times, and not too far up to forgo the advantages of standing within easy access of the sea. The fertile alluvial plain of the Tiber favoured agriculture, though it was liable to torrential floods. The hill country rises sharply above the plain and villages could be located within easy distance of the fields, yet out of reach of the flood-rush. In this respect, too, Rome was well placed; on its seven hills it was high above the floods; only low-lying districts such as the Circus Maximus between the Aventine and the Palatine were liable to inundation.

Who the Romans were it is very hard to say. They are a mixed people when we first encounter them on the site of Rome. There appears to have been from the first a double strain, as is indicated by the fact that cremation and burial seem to have been practised contemporaneously on the same site. It is probable that the nucleus of the peculiarly Roman strain, in so far as it is possible to isolate this, came down into Italy over the Alps from the north, some time during the second millennium B.C., with the various Italian peoples, who, attracted by the rich Lombardy plain, gradually penetrated southwards till most of the habitable regions of the peninsula were occupied. (There were other immigrants, such as the Etruscans, who came from the sea, and by the time that Roman

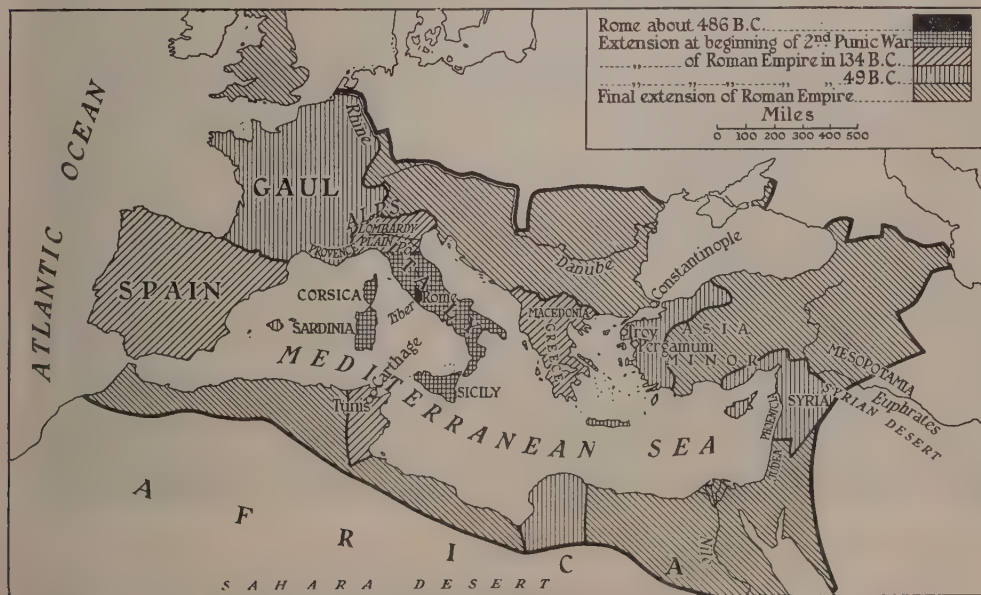
history proper began, the Greeks had settled many colonies round the south and south-west coasts of Italy.) These immigrations started before the beginning of the Bronze Age and went on into the Iron Age. In their various regions the peoples of Italy evolved their characteristic cultures until the people of the small hill town called Rome came to dominate them and ultimately to give them a unity. The later Roman tradition maintained that from the first Rome was a superior power imposing civilization on the uncivilized; but the evidence of archaeology goes to indicate that in her early days Rome was relatively barbarian contending with cultures superior to her own. But she was shrewd enough to learn from them and in the end to prove the master.

In truth the Roman as we know him in the pages of history is a fusion of types, racially a mongrel, though, like many mongrels, none the worse for that. Whether any substantial part of the Roman strain was contributed from overseas is hard to estimate. The great Etruscan people with whom Rome came both into peaceful contact and into conflict during the sixth and fifth centuries B.C., and from whose civilization she had much to learn, were almost certainly sea-borne immigrants from Asia Minor; and there is the legend made famous in the great epic work of Virgil that Rome was founded by Trojan Aeneas fleeing from Troy.

The traditional date for the foundation of Rome is 753 B.C. Rome began her career as a small village or town community, first fighting for existence among her neighbours and gradually coming to dominate them. Here at once it is possible to discern an initial advantage in the geographical site of Rome. By the end of the first century B.C. she became a world power, dominating all the shores of the Mediterranean; during the centuries that followed she became the greatest civilizing influence that the world had hitherto known, incorporating as it did the great legacy of Greece and part at least of that of Judea.

Compared with that of the Greeks the career of Rome is remarkably slow. It took her some four hundred years and more to become mistress of a small portion of middle Italy and another hundred years to gain control of the whole of Italy. After that her career is faster. She is drawn to interfere in one land after another close to her own boundaries without any apparent desire on the part of her government for expansion. The Roman Empire seems to have grown involuntarily. After it had reached its main bulk it required a new age and a new form of government to make it into an organic whole.

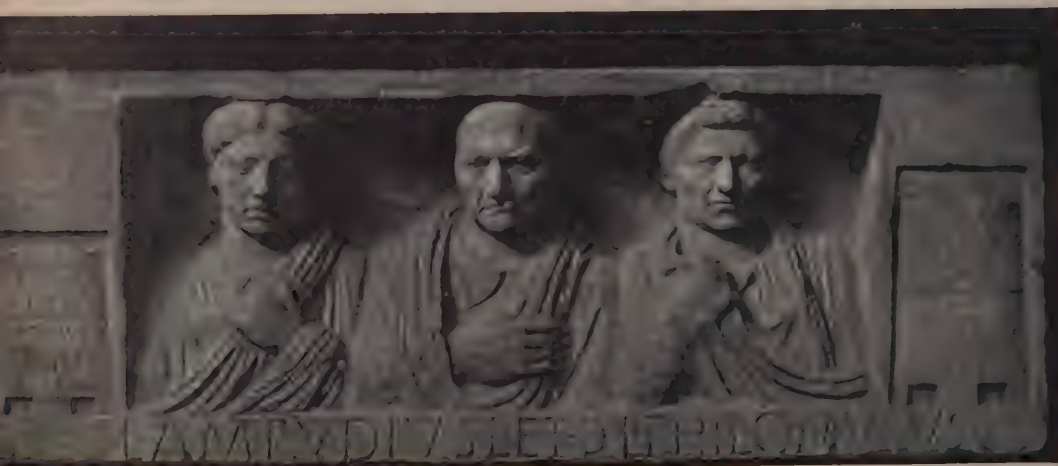
Let us consider this expansion geographically in the first place. By slow stages we find Rome to be making friends here, and enemies there; above all to be making friends of her enemies once they had been controlled and,



Stanford, London

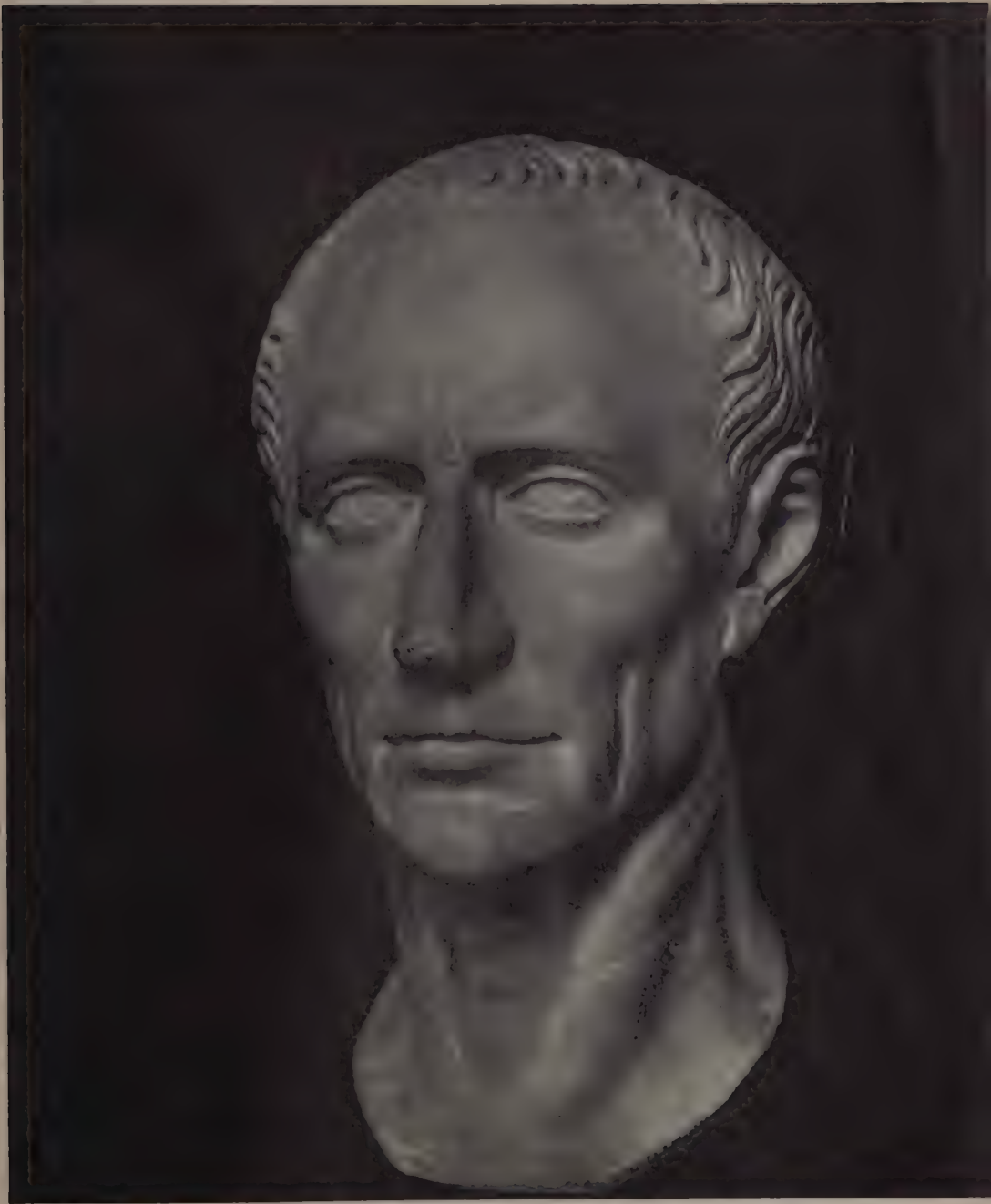


William J. Smith



British Museum

[Top] A view of the Mediterranean Sea, the nursery of Western Civilization. Bottom, Family monument, of one L. Ampudius Philomachus. It portrays a Roman citizen, his wife and daughter—all characteristic Roman types—of the last century of the Republic



British Museum

Head of Julius Caesar, the conqueror of Gaul and the forerunner of Augustus and the Empire. It is of Italian marble and was brought to England from Rome early in the 19th century. The hair is brushed forward, a style adopted by Julius Caesar when his baldness became an object of ridicule.



Dorien Leigh

The Arch of Constantine, in Rome. Constantine was the Emperor who was responsible for the division of the Roman Empire into Eastern and Western, for the new capital of Constantinople and for the official adoption of Christianity in the Empire. He reigned from A.D. 305 to 337. The arch is a fine example of a characteristically Roman architectural form. (Opposite) Detail of the Column set up in Rome by the Emperor Trajan to commemorate the conquest of Dacia (the modern Rumania), which was completed in A.D. 106. It shows various types of Roman army units on active service



by her genius in treaty-making, which obviated the danger of allowing her neighbours to combine against herself by isolating them from each other and binding them all to herself (this is the famous principle *Divide et impera*), slowly advancing her power to south, to east and to the north. Among the other peoples in Italy were the Greek colonies whose towns were scattered at opportune coastal sites down the lower half of the western coast, and round the toe and heel of Italy. Rome had no wish to conquer any of these: Rome was not in that sense aggressive, yet circumstances brought it about that she became the protector of these states where protection was needed and chastiser where the action of any of these other governments called for a check, until in the end they were all merged into the realm of Rome.

Once she had control of Italy it was but a step to Sicily. That step would not have been made if the initiative had been left to Rome. Yet Sicily was to be the meeting-ground between the two great powers of the western Mediterranean—Rome and the great commercial power of Carthage which had its origin in Phoenicia. Looking back we can see that the western Mediterranean was not big enough to contain two such powers at the same time. It took Rome over one hundred years to see that Carthage must be beaten down. The conflict started when Rome was called in to protect a friendly state in Sicily. The result was a war of twenty-three years which showed some of the most striking characteristics of the Roman people. Rome was not adapted for the fighting of wars overseas, as her army was a citizen militia, its members the small-holders on whom the food of the people depended; her Government, of which we shall see more presently, was that of a parish rather than of an empire. Rome suffered many reverses, but never gave up. She built fleet after fleet, made herself into a sea-power and defeated her enemy. Twenty-three years after the end of the first war Carthage came back in great force. The great Carthaginian general Hannibal invaded Italy overland across the Alps and for nearly fifteen years ranged at will in Italy inflicting crushing defeats on the Romans and was prevented from taking Rome and finishing off the war only by the dogged persistence and spirit of the Roman guerrillas. No sooner had Hannibal given up the war in Italy to return to North Africa than Rome followed up without delay and beat the great man on his own ground. Fifty years later by an act of seemingly brutal callousness the Romans

wiped out what remained of the site and power of Carthage; the Carthaginian menace had now gone for ever.

Such was the greatest epic in the wars of Rome. They brought many complications in their train. They committed Rome to taking over Corsica, Sardinia, Spain, Provence, the topmost reaches of Italy, which she had not yet penetrated, and all this at a time when Rome was not free of complications overseas in the east. Already in the era of the Carthaginian wars she was embroiled with the kings of Macedonia and Syria, powers which were the relics of the great empire of Alexander the Great. Slowly Rome mastered her enemies in spite of the treachery of commanders, political troubles at home, and unwillingness to expand. In spite of all these difficulties it seemed as if Rome as a child in the expansionist school of history could do no wrong. Her very mistakes turned to good luck. Macedonia was virtually subdued by the year 168 B.C. Twenty years later it was made into a province (that is to say, an additional sphere of duty for a Roman magistrate). A protectorate had been established over Greece some fifty years before. In the year 133 B.C. the Roman province of Asia, about the western third of Asia Minor, came to Rome by the legacy of its King Attalus of Pergamum. Once Rome had set foot in Asia Minor it was clear that she would have to go on until a natural boundary was reached.

At the end of the second century B.C. the violent and aggressive behaviour on the part of a North African prince brought an extension of Roman territory still further westwards from Tunis. Shortly afterwards arose a great panic occasioned by an invasion of Gaelic and German tribes at the north of Italy. These two were defeated and Rome's links with France and the north strengthened. During the last century B.C., the age of the great generals, Rome swept the Mediterranean free of pirates, reorganized the principalities of Asia Minor and Syria, extended the subjugation of Spain, and in the spectacular campaigns of Julius Caesar took over Gaul.

It is time to speak of the internal troubles which now precipitated this seemingly progressive world-state into a terrible series of civil wars, and out of their chaos produced a government which forged the empire into a

A corner of Pompeii, with Vesuvius dim in the background and part of the Temple of Apollo on the right





Dorien Leigh



Henry High

(Opposite) A smart shop in a fashionable quarter of the city of Pompeii, which was destroyed in an eruption of Vesuvius in A.D. 79. (Above) The city gate of Pompeii. Excavations were begun systematically in Pompeii in 1763 and have in the course of time revealed such detailed evidence of the Roman manner of life and of Roman craftsmanship in exterior and interior building







Peter Hill

Three significant examples of Roman architecture from the fringes of the Empire are shown on this and the two previous pages: the first, the Colonnade at Palmyra in Syria; the second, the Theatre at El Djem in Morocco and the third, (above) part of the Forum at Jerash in Transjordan

progressive whole and enabled it to realize its mission in the world. Rome began with a government of an Urban District Council. Her offices were so arranged that there was always a check upon the individual magistrate. Dual control was the order of the day. The army was a citizen army, her chief magistrates held power only for one year. But, once Rome was committed to fighting overseas the campaigns which would not obey

the rules of the seasons or the regulations of the Roman constitution, it became inevitable that commanders and armies should change their character. Commanders had their commands extended. The citizen army became a professional army. The conqueror in a great war returning to Italy after a triumphant conclusion was a greater force in politics than the traditional senate of ex-magistrates and the popular assemblies, or

than the ordinary routine magistrates. In the end it was the great generals, Sulla, Pompeius, Caesar, who brought the downfall of the Republic. For years the senate which controlled foreign policy had been most reluctant to form new provinces, even when there was urgent necessity for it, because to do so meant the creation of new magistracies, and the consequent admission of new-comers into the aristocratic circle. Internally Rome begins with the problem of patrician versus plebeian families. But this pales into insignificance beside the growing conflict of the individualist against the constitution.

Out of the civil wars in which Pompeius fought Caesar, and Octavian fought Antony, emerged a new world. Octavian became the Emperor Augustus and was able to complete the work which his adoptive father had been assassinated before being able to complete. He set himself to give the Roman world internal peace and to make its frontiers strong. Though he reigned long he did not see the completion of the true boundaries of the empire, but all his life he worked for that. Rome was to reach the connected line of the Rhine and the Danube in the north, the line of the Euphrates and the Syrian desert in the east, of the Saharan desert in Africa and of the Atlantic in the west. This great work was completed after the end of the first century A.D. Economically the period of the empire is an object lesson in the possibilities of free trade. Many of the troubles of Rome in the period in which she was labouring to bring the true empire to birth came from a narrow conception of a self-sufficient Italy. With the advent of the empire the idea of a self-contained Italian agriculture went by the board. The idea of a free-trade Mediterranean came in its stead. It was in this unified and well-articulated empire in which roads with Roman thoroughness radiated from all centres of civilization, in which travel was easy, quick and safe, that the gospel of Jesus Christ could spread as rapidly as it did. It was within this Empire that the conceptions of law, order, government, rights, citizenship, were extended from Rome to her dependants and so became a legacy and an inspiration lasting on through the dark ages into the modern world.

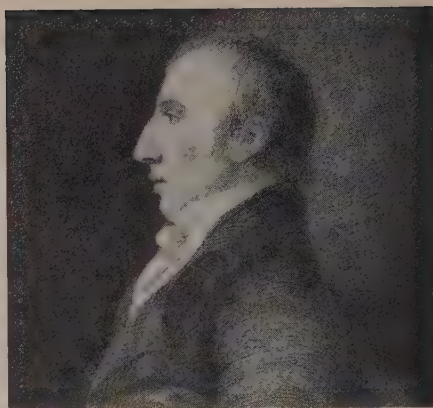
The first two centuries A.D. were a golden age in which Rome came to realize that she had a responsibility to her dependants and a mission, as Virgil says, to impose upon the nations the custom of peace. After these golden years there followed a period of troubled dynasties, for a time healed by the

genius of Diocletian and Constantine. In the fourth century the Roman Empire was divided into two halves, the western half of which finally disintegrated under barbarian pressure from the north. The process was more or less complete by the end of the fifth century A.D., by which time there was a Gothic kingdom of Italy and a Vandal kingdom in Africa. The part played by the invading hordes from outside has been exaggerated. For years Rome had been slowly barbarizing herself from within, by taking outsiders into the service of the State and of the Legions. It is sad to reflect that a logical and human development here hastened the coming of disaster. To put it in another way, the rhythm of Rome's development in the end brought her down. In the east the empire went on with many revivals, and here and there with much glory, but after the dark ages it became smaller and smaller until it comprised little beyond a capital city, Constantinople. When this fell in the year 1453 to the attacks of the Ottoman Turks, its fall became a landmark in the modern history; for not the least of the factors which helped on the revival of learning in the west was the knowledge of the Greek legacy and the possession of Greek manuscripts which refugees from Constantinople brought with them in their flight westward.

For five hundred years Rome in the wake of her armies had brought peace; her great policy of self-governing communities inside an expanding territory controlled by Roman magistrates inspired by Roman law and protected by Roman armies had created a strong empire within which the diverse cultures of the Graeco-Roman civilizations flourished and justice reigned. The contribution of Augustus and the Principate towards redressing the wrongs of old republican methods of government in the provinces was great. But a serious inequality remained. The extension of citizen rights opened up careers in the Empire to men from the provinces; but the provinces as political units had no voice, no representation, in the government of the Empire. In the centre was Italy, its own economic and moral fabric in decline, dependent economically on the provinces whose vitality was gradually undermined by the bureaucracy which came to take the place of government. If new life was to come into Europe it could come only from the barbarian peoples beyond. But they, when they came, assimilated in a great measure the Roman traditions of government and of law; and to our day the Roman leaven is still at work.

Wordsworth's Journey Through France

by JOHN LEHMANN



One year after the fall of the Bastille, in July 1790, a twenty-year-old Cambridge undergraduate by the name of William Wordsworth crossed to Calais (a contemporary print of Calais pier is shown on the opposite page) and set out on a walking tour across France with his friend, Robert Jones. In this article Mr Lehmann describes that journey and traces some of the effects it had on the young man who was to become one of England's greatest poets

FROM the reading of the greatest English poets, and the documents that have come down to us about their lives, one impression remains, more powerful than any other: in every poet's inspiration there is a mystery that is never fully revealed, even to the poet himself. No poet of the last century and a half exemplifies this more clearly than William Wordsworth.

In later life Wordsworth addressed some famous lines to a former schoolfellow, beginning:

There was a boy: ye knew him well, ye cliffs
And islands of Winander!—many a time
At evening, when the earliest stars began
To move along the edges of the hills,
Rising or setting, would he stand alone
Beneath the trees or by the glimmering
lake. . . .

It was his own youth among the lakes and mountains of Westmorland of which Wordsworth was thinking, and he was trying to trace back to its source the genius with which he knew himself to be endowed. The path he had travelled since that time had been erratic, violent and obscure; yet it emerged into a rarely equalled splendour of mature achievement. The boy who "blew mimic hootings to the silent owls", who passed four undistinguished moody years at Cambridge, became the greatest poet of nature England has ever known; a giant who burst through the conventions in thought and art of the 18th century and drove the path into the new romantic age for his contemporaries; whose influence has not yet ceased to be profoundly

felt wherever English is spoken or understood; whose voice, in the dark days when England—once before—stood against a hostile, embattled Europe, was the very spirit of all that is finest in English history and in the English way of life. . . .

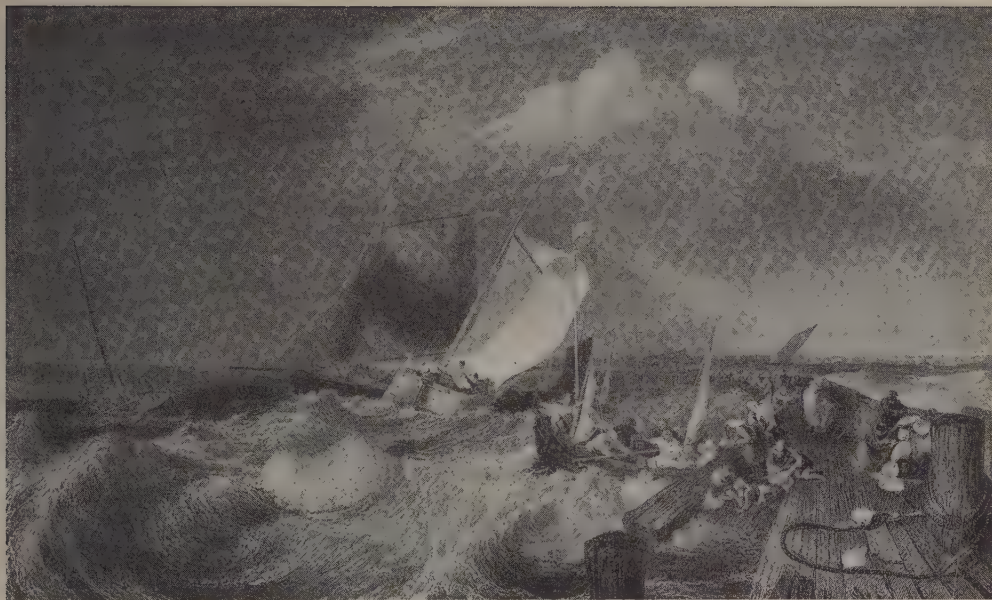
It is not to be thought of that the flood
Of British freedom, which, to the open sea
Of the world's praise, from dark antiquity
Hath flowed "with pomp of waters unwith-
stood",—

Roused though it be full often to a mood
Which spurns the check of salutary hands,—
That this most famous stream in bogs and
sands

Should perish; and the evil and the good
Be lost for ever. In our halls is hung
Armoury of the invincible knights of old:
We must be free or die, who speak the tongue
That Shakespeare spake; the faith and morals
hold

Which Milton held. In everything we are
sprung
Of earth's first blood, have titles manifold.

The great minds among his contemporaries recognized, for all the blemishes they noted in aspect or utterance, that in Wordsworth a genius had risen among them. A meeting with him left an indelible impression. "His eyes", said De Quincey, "are not, under any circumstances, bright, lustrous or piercing; but after a long day's toil in walking I have seen them assume an appearance the most solemn and spiritual that it is possible for the human eye to wear. The light which resides in them is at no time a superficial light; but, under favourable accidents, it is a light which



seems to come from unfathomed depths: in fact, it is more truly entitled to be held 'the light that never was on land or sea', a light radiating from some far spiritual world, than any of the most idealizing that ever yet a painter's hand created. . . ."

Wordsworth himself was more conscious, perhaps, that there was a mystery about his inspiration than any poet has ever been. He searched to penetrate that mystery in many poems, above all in his greatest poem *The Prelude*. And from what he tells us there, and from the evidence of patient research and intelligent conjecture assembled since his death, we cannot doubt that the central experience of his life, that set all his powers of mind and imagination in motion, was: the French Revolution.

Bliss was it in that dawn to be alive,
But to be young was very heaven! . . .
Not favoured spots alone, but the whole earth
The beauty wore of promise, that which sets
(As at some moment might not be unfelt
Among the bowers of Paradise itself)
The budding rose above the rose full-
blown. . . .

The revelation which the French Revolution gave him was intimately associated with another revelation, which came from his experiences in the Alps, when as a young man of twenty he visited them with his friend Robert Jones. This journey across France is, therefore, of central significance in his life

and work, and deserves the most careful study. We have three main documents to go by: a long letter which he wrote to his sister Dorothy from Keswill on the Lake of Constance on September 6, 1790, the poem entitled *Descriptive Sketches* which he wrote in 1793, and the later and far more revealing passages in *The Prelude*, written when France





Paul Popper

Wordsworth and his friend passed down the Rhône and at the beginning of August struck out into the mountains of Savoy (left). One of the places which made the deepest impression on them was the Grande Chartreuse (opposite), the mother house of the Carthusian Order near Grenoble. They stayed there two days, and though Wordsworth was already fired by revolutionary enthusiasm, he has recorded the distress he felt at seeing this haunt of "awful solitude" disturbed by the soldiers of the new France

and all that it had meant for him was a closed—a strangely closed—chapter in his life.

The two young men set out from Calais on the evening of July 14, first anniversary of the fall of the Bastille. Their appearance was singular, as Wordsworth himself observed in his letter, with one of his rare flashes of humour: "We have often observed that, in passing through a village, we have excited a general smile. Our coats, which we had made light on purpose for our journey, are of the same piece; and our manner of bearing our bundles, which is upon our heads, with each an oak stick in our hands, contributes not a little to that general curiosity which we seem

to excite." A few weeks later they had reached the mountains of Savoy and crossed into Switzerland. Their whole expenses had not been more than the remarkably small sum of twelve pounds. They stayed for two days at the Grande Chartreuse, which made a profound impression upon them, then moved on through Savoy to Geneva. From Geneva they followed the side of the lake to Villeneuve, and thence, going upstream along the Rhône to Martigny, left their bundles and struck over the mountains to see the glaciers of Savoy. Wordsworth was already keyed up to an extraordinary pitch of excitement and awareness, and as he passed into the high



Peter Hill

mountain country it is evident that his excitement grew ever greater. The supreme moment was approaching. "After passing two days in the environs of Chamouny," he wrote, "we returned to Martigny, and pursued our route up the Valais, along the Rhône, to Brig. At Brig we quitted the Valais, and passed the Alps at the Simplon, in order to visit part of Italy. The impressions of three hours of our walk among the Alps will never be effaced. From Duomo d'Ossola, a town of Italy which lay in our route, we proceeded to the lake of Locarno, to visit the Boromean islands there, and thence to Como. A more charming path

was scarce ever travelled over than we had along the banks of Como. . . . At the lake of Como, my mind ran through a thousand dreams of happiness, which might be enjoyed upon its banks, if heightened by conversation and the exercise of the social affections. Among the more awful scenes of the Alps, I had not a thought of man, or a single created being; my whole soul was turned to him who produced the terrible majesty before me."

The wanderings which followed, in and out of Switzerland and the mountains, are less important. From the lake of Constance, where he began to write the letter to Dorothy, Wordsworth and his companion followed the



W. H. Stiles del.

The city of Geneva (top) was one of the many places Wordsworth visited in his wanderings through Switzerland and Northern Italy. The experience which marked itself most lastingly on his mind was the ascent from Brig (bottom) through the sublime scenery of the Simplon Pass (opposite).



Rückgrat Abseiler

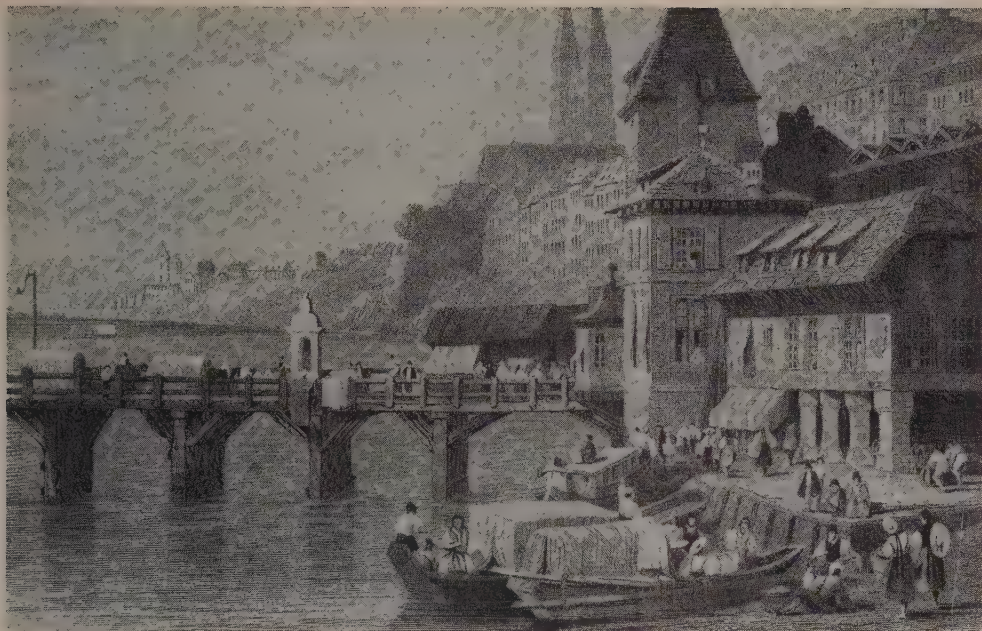


Rischgitz Studios



Hilary Jones

On the last stages of their journey the two friends followed the Rhine downstream, crossed it, reached Lucerne (above), moved from there through the valley of Lauterbrunnen (left) and arrived in Basle (opposite) on September 21, just over two months after they set out. From there they went down the Rhine by boat to Cologne, and so back to England at the beginning of October



Rischgitz Studios

Rhine downstream, crossed it, reached Lucerne, moved from there through the valley of Lauterbrunnen to Berne; and after exploring the country round the lake of Neuchâtel, arrived in Basle. From there they intended, according to the letter, to travel down the Rhine to Cologne and reach England again by way of Ostend and "the paquet for Margate".

Three years later, in 1793, Wordsworth published his *Descriptive Sketches* "taken during a pedestrian tour among the Alps" and dedicated it to Robert Jones. The verse is as pedestrian as the tour; it was an essay in a conventional manner which the poet was soon to outgrow, embellished by many images deliberately lifted from someone else's prose work. The medium let through nothing of the excitement of the letter, and if we had no other evidence, we might well conclude that the crossing of the Alps had only a passing and soon forgotten significance for him:

A hope, that prudence could not then approve,
That clung to Nature with a truant's love,
O'er Gallia's wastes of corn my footsteps led;
Her files of road-elms, high above my head
In long-drawn vista, rustling in the breeze;
Or where her pathways straggle as they please
By lonely farms and secret villages.
But lo! the Alps ascending white in air,
Toy with the sun and glitter from afar. . . .

We might be lost in our interpretation of those crucial years between 1790 and 1793, if we did not have the passages in *The Prelude* which corroborate and so powerfully enlarge the impression given by the letter. By the time he wrote *The Prelude* Wordsworth was a poet who could bend words to the expression of his soul with consummate mastery, and the crossing of the Simplon assumes its rightful place in his experience. Behind the awe-inspiring lines one can feel a turmoil reaching to the very depths of his being:

. . . The brook and road
Were fellow travellers in this gloomy pass
And with them did we journey several hours
At a slow step. The immeasurable height
Of woods decaying, never to be decayed,
The stationary blasts of waterfalls
And everywhere along the hollow rent
Winds thwarting winds, bewildered and forlorn,
The torrents shooting from the clear blue sky,
The rocks that muttered close upon our ears,
Black drizzling crags that spake by the wayside
As if a voice were in them, the sick sight
And giddy prospect of the raving stream,
The unfettered clouds, and region of the
Heavens,
Tumult and peace, and darkness and the light
Were all like workings of one mind, the features
Of the same face, blossoms upon one tree,

Characters of the great Apocalypse,
The types and symbols of Eternity,
Of first and last, and midst and without
end. . . .

This supreme vision, source of so much that is most significant in Wordsworth's writing, had been attained not merely by the sudden effect of Alpine scenery on a remarkable young man's extremely impressionable mind, but by all that he had witnessed *among human beings* between Calais and the Simplon—by the journey through France. Of that there can be scarcely any doubt. In the letter to Dorothy he had written: "During the time, which was near a month, that we were in France, we had not once the smallest deficiency of courtesy in any person, much less of any positive rudeness. We had also perpetual occasion to observe that cheerfulness and sprightliness for which the French have always been remarkable. But I must remind you that we crossed it at the time when the whole nation was mad with joy in consequence of the revolution. It was a most interesting period to be in France; and we had many delightful scenes, where the interest of the picture was owing solely to this cause." In *The Prelude* many fascinating details are given of these "delightful scenes" they encountered, as they walked on through a countryside full of the flower-decked triumphal arches and garlanded windows that had been prepared for that intoxicating first anniversary of the fall of the Bastille:

. . . Once, and more than once,
Unhoused beneath the evening star we saw
Dances of liberty, and, in late hours
Of darkness, dances in the open air
Deftly prolonged. . . . In this proud company
We landed—took with them our evening meal,
Guests welcome almost as the angels were
To Abraham of old. The supper done,
With flowing cups elate, and happy thoughts
We rose at signal given, and formed a ring
And, hand in hand, danced round and round
the board;
All hearts were open, every tongue was loud
With amity and glee; we bore a name
Honoured in France, the name of Englishmen,
And hospitably did they give us hail,
As their forerunners in a glorious course. . . .

To the influence of Nature Wordsworth's heart was already open; but with this astonishing vision of an emancipated people working on him, the great mountains which he was approaching became symbols of something vaster than anything in Nature had ever meant to him before. We would be justified in deducing this if we had no other clues; but if we look carefully enough, we shall find that he is practically as explicit as we could wish in other passages of the same book of *The*

Prelude. Just before the Simplon crossing he gives an indication how Nature and the ideas of the revolution were mingling in his mind:

Whate'er in this wide circuit we beheld,
Or heard, was fitted to our unripe state
Of intellect and heart. With such a book
Before our eyes, we could not choose but read
Lessons of genuine brotherhood, the plain
And universal reason of mankind,
The truths of young and old. . . .

The intoxication lasted, though the terrifying vision in the Pass gave way to other dreams and hopes nearer to everyday reality. On the homeward journey he describes how they met revolutionary armies ready "for battle in the cause of Liberty", and defines his own mood of exultation as being so intense already that the sight seemed merely part of the element in which he was moving "as a bird moves through the air", for:

The ever-living universe,
Turn where I might, was opening out its
glories,
And the independent spirit of pure youth
Called forth, at every season, new delights
Spread round my steps like sunshine o'er green
fields.

This overwhelming apocalypse on the journey with Robert Jones decided Wordsworth, once he had taken his degree at Cambridge, to return to France in the autumn of 1791. It was the step which was to complete the cycle of vital experience from which the great poet was to be born. He planned to spend the winter in the country of the Revolution, learning the language and watching the forces at work which had so violently broken through the crust of 18th-century society. He passed through Paris, where he saw the Revolutionary government "toss like a ship at anchor, rocked by storms", and went on to Orleans. There he settled, and there he met two people who profoundly affected his life, who must be counted with his sister Dorothy and the poet Coleridge in the four chief personal influences on his career as a poet.

Wordsworth was now engaged in a passionate sympathy towards the Revolution, but as in other stages of his development, he needed contact with a concrete person to crystallize all that was stirring and turning within him into a conviction and creative impulse. It was the young officer Michel Beaupuis who finally changed all the theories and enthusiasms into a human reality for him. Beaupuis's attitude was in striking contrast to that of the other French officers stationed in Orleans. Suspicion with them was gradually turning into hatred and covert opposition, the inevitable reaction of an officer caste trained to a narrow loyalty in any major social up-



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In the autumn of 1791 Wordsworth returned to France, and, after a short stay in Paris, settled in Orleans (above) for the winter. It was there that he met Annette Vallon, and fell in love with her

heaval. Beaupuis, however, saw the agony and hope of the ordinary people of France behind the Revolution, and all the generosity and idealism of his nature flowered in its light. Wordsworth wrote of him:

Man he loved
As man, and, to the mean and the obscure,
And all the homely in their homely works,
Transferred a courtesy which had no air
Of condescension; but did rather seem
A passion and a gallantry, like that
Which he, a soldier, in his idler day
Had paid to woman. . . .

Beaupuis and the poet spent long hours together discussing political theory, the pattern of history and the events of the day, and would walk along the banks of the Loire or among the neighbouring forests in the happiness of an inspired friendship. On one of their walks they had an encounter that evidently made a deep impression on Wordsworth: the picture springs to life from the passage in *The Prelude*:

We chanced
One day to meet a hunger-bitten girl
Who crept along fitting her languid gait
Unto a heifer's motion, by a cord
Tied to her arm, and picking thus from the
lane

Its sustenance, while the girl with pallid hands
Was busy knitting in a heartless mood
Of solitude, and at the sight my friend
In agitation said: "'Tis against *that*
That we are fighting." I with him believed
That a benignant spirit was abroad
Which might not be withstood, that poverty
Abject as this would in a little time
Be found no more. . . .

To this concrete and yet eternally typical image of the oppressed of all times, the "hunger-bitten girl", was to be added in Orleans another concrete image of a different sort, a girl who, we have every reason now to conjecture, became the focus of all the poet's youthful passion and sensuous love of beauty. Here we approach the obscurest region in his life. There is no direct reference of any sort in *The Prelude* to the experience, though in the story of Vaudracour and Julia one is surely presented with a transference into fiction of this first love affair. The girl was Annette Vallon, and she became the mother of Wordsworth's child. Why, then, did she never become his wife? Why did he escape from her to Paris and thence to England without waiting to see the newly born child, Caroline? Why did he endeavour to efface the whole affair so thoroughly that we have

only rediscovered it in recent years? Why did he return to Calais a decade later to see her before he married his wife Mary Hutchinson? . . . We do not know the answers to these questions. We only know that war broke out very soon after, in 1793, and lasted nine years. And the war cut him off completely from Annette Vallon. But something had happened besides an outbreak of war. The poet had experienced something, beginning with the September massacres, that shocked him first of all without extinguishing his faith, and then, as the war gave Terror its opportunity and excuse, filled him with loathing for all that was happening in France:

It was a lamentable time for man. . . .
Through months, through years, long after the
last beat
Of those atrocities, the hour of sleep
To me came rarely charged with natural gifts,
Such ghastly visions had I of despair
And tyranny, and implements of death;
And innocent victims sinking under fear. . . .

In this great upheaval of his whole personality, in which agony of heart over Annette and disillusionment with his republican enthusiasm combined to drive him almost to the brink of madness,—so we must read the riddle—to what could he turn for solace, to whom?

It was to nature, to that external nature of sea and sky and mountain and meadow flower with which he had felt so complete, so instinctive an intimacy as a boy; and to his sister Dorothy, who was to be his loving and beloved companion through all the greatest years of his poetic achievement:

She whispered still that brightness would
return,
She, in the midst of all, preserved me still
A Poet, made me seek beneath that name
And that alone, my office upon earth. . . .

Out of the turmoil of passion and remorse, out of the blinding vision of the world of action, was born the poet who was so possessed by nature that he could cry:

. . . the sounding cataract
Haunted me like a passion: the tall rock,
The mountains, and the deep and gloomy
wood,
Their colours and their forms, were then to me
An appetite; a feeling and a love,
That had no need of a remoter charm
By thought supplied, nor any interest
Unborrowed from the eye. . . .

Out of that shattering revelation of human suffering and the corruption of worldly power, out of that crucible which refined

away all the falsity and affectation of the poetic world of his predecessors, came the poet who, together with that other great poet, Samuel Taylor Coleridge, his neighbour and his friend, was to give an entirely new direction to English poetry: "The principal object proposed in these poems was to choose incidents and situations from common life, and to relate or describe them, throughout, as far as was possible in a selection of language really used by men, and, at the same time, to throw over them a certain colouring of imagination, whereby ordinary things should be presented to the mind in an unusual aspect. . . ."

Thus the declared programme of the Preface to *Lyrical Ballads* which the two poets published at the turn of the century. It was, for Wordsworth, the dedication to a task which would give him anchorage after the stormy seas through which he had passed; and at the same time a transmutation into a different substance of the political and social emotions that might have been expressed in fatal action if lucky chance—as he himself admits though affording no closer glimpse of the actual sequence of events—had not brought him back to his own country just before the gates were closed. The results, as so often happens with the manifestos of poets and artists, were at the same time less and greater than the programme. Intellectual propositions are, perhaps, in such cases, no more than the grain of sand in the oyster shell, that starts the irritation round which the pearl grows by its own mysterious process. Enough, that from these plans grew the immortal lyrics whose simplicity is, again and again, transformed with an ease of transition that is like magic, by some sublime image; the work of a man whose feet were firmly on the common earth while his head was among the stars.

And yet the poet who wrote *The Highland Reaper* and the Lucy poems was a haunted man. As the war went on the fires which had burnt so fiercely in him during the years between 1790 and 1793 gradually subsided. In nature he heard no longer those apocalyptic voices that had spoken to him out of the giddy Alpine heights, but more and more "the still sad music of humanity". Those "ghastly visions" he had had of "innocent victims sinking under fear" would not leave him; and as Napoleon's star rose and the Revolution seemed to be abandoning all that had fired his early enthusiasm, and turning into a system of oppression in France itself and a lust for conquest abroad, his feeling for his own country grew. On his return from his visit to Annette Vallon in Calais in 1802,

at the end of the war, and before the new war broke out, the change is complete:

Here, on our native soil, we breathe once more.
The cock that crows, the smoke that curls, that
 sound
Of bells; those boys who in yon meadow-
 ground
In white-sleeved shirts are playing; and the
 roar
Of the waves breaking on the chalky shore;—
All, all are English. Oft have I looked round
With joy in Kent's green vales; but never
 found
Myself so satisfied in heart before.
Europe is yet in bonds. . . .

In England, he felt, there was still respect for moral tradition, still the possibility of following that intuitive guidance of the feelings which he valued so deeply, and which the iconoclastic fanatics of the Revolution had so fatally spurned in favour of the extremes of heartless logic. But he was well aware of his country's faults, of the general apathy to great issues and the corruption in high places he felt was eating into her spirit; and there is nothing nobler in the whole range of English public poetry than his invocation in sonnet after sonnet to England's better self, to that England in whom he found "a bulwark for the cause of men". They have become so familiar to us, and have so completely passed into our national blood-stream, that it is difficult to see them with the freshness of a new experience. And yet the prayer that Wordsworth expressed with such passionate anxiety a century and a half ago in a great crisis of our history was not unlike the prayer that many lovers of their country formed in their hearts between 1938 and 1940:

Milton! Thou shouldst be living at this hour:
England hath need of thee: she is a fen
Of stagnant waters: altar, sword and pen,
Fireside, the heroic wealth of hall and bower,
Have forfeited their ancient English dower
Of inward happiness. We are selfish men;
O raise us up, return to us again,
And give us manners, virtue, freedom, power!

Never were the power and virtue of national independence more magnificently celebrated than in his sonnets on the Extinction of the Venetian Republic and the subjugation of Switzerland. The ideal splendour of his earlier vision, of Liberty, Fraternity and Equality among all men, was growing dim; but the cycle of experience that had been started with that journey across France while he was still an undergraduate informed all that was finest in his poetry. It had given him not only a new faith in the soul of England, but, beyond that, a vision of human destiny, and a glimpse, too dazzling for him ever to be able to translate into



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Wordsworth's sister, Dorothy, who was probably the most important human being in his whole life

adequate words, of the face of God. If he had never crossed to France, on that first anniversary of the Bastille's fall in 1790, one can imagine that he might have remained a poet only on the level of the early Pope-like sketches, writing charming verses in a country vicarage—his parents originally intended him for Holy Orders—for the rest of his life.

The mysterious fire that had burnt in William Wordsworth's heart was all but extinguished soon after he wrote the great patriotic sonnets. For another half-century he lingered on, during which the public recognition of his greatness came to him, in a State pension and the Poet Laureateship. But the poet who was received in triumph in Oxford in 1839 had all but forgotten the sublime and fearful experiences of his youth, so thickly had he spun them round with a laboured optimism in philosophy and an ever-hardening conformity and conservatism in politics. Few read the writings of those years: the long, dull, pompous pages of the poet who had lived too long cannot hide the glory of that "visionary gleam" whose first fading, paradoxically, he celebrates in the great Ode it illumines most powerfully, *The Ode on the Intimations of Immortality*:

There was a time when meadow, grove and
 stream,

The earth and every common sight,
 To me did seem
Apparelled in celestial light,
The glory and the freshness of a dream.

It is not now as it hath been of yore;—

Turn wheresoe'er I may

By night or day

The things which I have seen I now can see no
 more.

The South African Wool Farmer

by MARJORIE JUTA

"How I wish I were an ostrich-farmer!"

"Why particularly?" said I.

"Because I could put my whole year's clip in the back of a Cape Cart and take it off to market without any trouble," said the sheep-farmer grimly, as he lashed his long whip over the backs of sixteen straining oxen yoked to a wagon.

The poor beasts struggled in the mud; the great wheel of the ox-wagon stuck in a deep hole on the rough road, and the big load of wool bales rocked precariously.

We were taking his yearly wool clip from the farm to the railway, whence it would be transported in a less primitive fashion to the port of Durban for the wool auction.

I waited until the wagon was moving on more easily. Then I hazarded a suggestion that he was luckier to be a sheep-farmer than an ostrich-breeder.

"In fact, of course I am," he said. "They really *are* broke, because feathers are out of fashion. Now wool is a different matter. It must always be needed."

He told me that after the last war he had toured for thousands of miles looking at every British Dominion with a view to settling down. He had capital, and physical vigour, and the prospects in South Africa had captured his imagination from the start. "This put the final touch to it," he said, and waved his hand across the landscape.

A thunderstorm was over as quickly as it had come, and the sun blazed down from a blue sky. Great white cumulus clouds were breaking up into lighter formations. The blinding light caught their billowing curves, leaving the shadows deep and dramatic.

For thirty miles the rolling veld undulated towards the Drakensberg Mountains. Like

Merinos in a sheep kraal in the Cape Midlands (left); this 'Middle Veld' affords excellent grazing and is therefore the most thickly populated sheep country in South Africa. (Right) Black-faced Persian ewes, a distinctive South African breed

South African Railways and Harbours



From the author

purple jagged cliffs the summits stood out against the sky. The ravines which seared the sides of the massive range were thickly wooded.

The foreground gave way to flowing foothills which reached down to the plain across which we travelled.

Sheep dotted the landscape, and grazed on the short, sweet grass. A river, stocked with rainbow trout, wound in exaggerated curves in the valley below. The banks were bare, except for grass, and the river flowed fast over rocks and pools. In the distance, the sheep-farm's thatched homestead stood on a hillside, sheltered by trees, and big farm buildings sprawled across the slope below.

The whole farm was divided into great fenced camps, and horses and cattle grazed in the home paddocks.

"It's a pretty ideal way of life that I found for myself," he said, "but I'm not exactly making the fortune I planned."

He had put capital into his sheep freely in those early days, at the height of the boom. Wool fetched four shillings a pound—for the world shortage was acute, owing to the war. It was not improbable that as the production of wool increased, and the shortage was gradually made good, the price would drop. But no one had foreseen how rapidly.

In South Africa a great wave of develop-

ment had started with the advent of peace in 1919. Agriculturists had been sent to Australia to study new methods of breeding, and types of pasture. The Merino sheep was the foundation on which all farmers built. It was only necessary to invest all available capital in a Merino flock, and automatically the first year or two paid for the initial outlay. Then the future was pure profit. So thought the optimists in the early 'twenties. And up to a point there was truth in their assumption. For wool today is South Africa's primary agricultural product.

But we have to look back into history to trace the rather fabulous Merino story.

In the 17th century the Dutch East India Company had created a port of call in the Cape Peninsula. Vegetables and fresh provisions were grown there for the ships passing through to the East. These provisions were obtained by barter with the Hottentots, a nomadic, pastoral people inhabiting the western half of South Africa. They bred an indigenous sheep, large and hairy, but useless for wool. This was the only South African sheep until late in the 18th century.

Spain, from the Middle Ages, had jealously exercised a monopoly of her Merino sheep, which had fine, soft wool, with a marked crimp, or wave, and a silky lustre. In 1789 the King of Spain presented the Dutch

Merino rams bear heavy and much wrinkled fleeces. In this photograph they are grazing in an enclosed pasture; in the background lie the folded foothills of the Drakensberg

From the author



Government with two Merino rams and four ewes. They were sent to Colonel Gordon, the Commandant of the Dutch East India Company at the Cape. On his death his flock was sold, and many of the sheep were bought by Dutch farmers; others went to Australia where they laid the foundations of the present Australian wool industry.

The flocks of the Cape Dutch acquired larger tracts for pasturage after the Great Trek of 1834—the epic migration of South African history. From then onwards the development of the hinterland went on apace, until today the Union is a thriving agricultural country. And on three-quarters of it sheep can be raised profitably. Only three countries, Australia, Russia and the United States, raise more sheep than the Union of South Africa. Her wool compares favourably with all three in fineness and quality.

Big strides forward were made after the last war. Scientific methods were introduced, and improvements in breeding, and in the quality of wool itself, were extensive.

In the old days sheep had roved at will, but now the land was divided into camps and fenced, so that a rotation of grazing was possible. No longer could the sheep farmers trek down from the High Veld in the winter for the grazing, free to all, in the warmer Low Veld. No longer could they shoot big game as they shepherded their flocks, for land was growing valuable. Fencing was put up so that sheep could graze naturally and did not have to be driven in nightly by the herd-boys to kraals, to avoid the depredations of jackals. It had been found that the dry, dusty manure in these kraals got into the wool and spoilt the quality, and the constant driving limited the hours of feeding. A study of pasture resulted in conservation of the veld to guard it against over-grazing. New crops as supplementary fodder were grown, such as lucerne, under irrigation in the dry, hot Karroo, and mixed grasses in the highlands of Natal where the cold winters required a richer pasturage. 'Licks', containing the chemicals in which the soil was deficient, were also introduced.

There are roughly three types of sheep country in South Africa, the High Veld, the Karroo and the Mixed Veld, all very different in character and climate.

The High Veld of Natal I have already described. The Karroo is in direct contrast to the green foothills of the Drakensberg. I can best describe it by quoting from Olive Schreiner's *Story of an African Farm*:

The plain was a weary flat of loose red sand, sparsely covered by dry Karroo bushes, that cracked beneath the tread like tinder, and showed

red earth everywhere. Here and there a milk bush lifted its pale-coloured rods, and in every direction the ants and beetles ran about in the blazing sand. The red walls of the farmhouse, the zinc roofs of the outbuildings, the stone walls of the 'kraals' all reflected the fierce sunlight, till the eye ached and blenched. No tree or shrub was to be seen far or near. The two sunflowers that stood before the door, outstared by the sun, drooped their brazen faces to the sand, and the little cicada-like insects cried aloud among the stones of the 'kopje'.

The overseer . . . stood out at the 'kraals' in the blazing sun, explaining something to the two kaffir herd-boys. Away beyond the 'kopje' his son herded the ewes and lambs—a small dusty herd—powdered all over from head to foot with red sand. . . . His flock gave him little trouble. It was too hot for them to move far; they gathered round every little milk bush, as though they hoped to find shade, and stood there motionless in clumps. . . .

Strangely enough, even in a drought such as this grim description gives us, the sheep are better off than in a drought elsewhere, because the permanent bushes do not die, as grass does, and they contain rich chemicals necessary for the growth of good wool. The salt bush has also been introduced from Australia. But the Karroo is not always dry. I have seen it after rain, when it looked like a tapestry of flowers; the wilderness "blossom'd like a rose".

The Mixed Veld (karroo and grass) is also excellent sheep country, and comprises the large area of the Cape Midlands and the Western and South-Western Free State, possibly the most thickly populated sheep country in South Africa.

"And what of all this sheep farming? Does it pay?" I asked my farmer friend who drove the wagon. It was, of course, the crux of the whole situation.

"It all depends on what you mean by 'pay'. If you mean—can you make huge profits, and grow rich in a few years and retire—definitely 'No'. If you mean—can it provide a good home for a man and his wife and family, secure good healthy nourishing meals, and make sufficient to give the children a good sound education, and at the same time live a healthy life—then the answer is definitely 'Yes'. But the South African farmer's life is a continual war waged against pests, disease, droughts and locusts, and all manner of enemies. They can be overcome by work and enterprise. The only fatal factor would be abnormally low market prices. I started, as I told you, when wool was four shillings a pound. I bought a flock of over a thousand sheep. I sheared them that year, and the cheque for my clip was £600. I toiled for eight years. I studied breeding, culled sheep

A peak of the Drakensberg Mountains, with its flowing foothills. This range forms a ridge running for hundreds of miles; on the Natal side, it slopes gently down to the sea. The foothills provide short, sweet grass for the flocks of Natal sheep farmers



(Below) A homestead in the Karroo, and the dam which provides irrigation for crops and stock. Note the Cape cart—still the universal form of farm transport in South Africa—in the right foreground, about to go through a wire gate

From the author

South African Railways and Harbours





An African agricultural school which specializes in sheep raising. The sheep here are Merino ewes and lambs and the two tall trees are eucalyptus (blue gums). (Below) The farmer displays the length of staple of the fleece of a champion ram. (Opposite) Ox-wagons loaded with wool bales on their way to railhead, whence the wool is sent to the coastal ports. There it is sold by auction to wool buyers from all over the world



By courtesy of the Farmers' Weekly (South Africa)

with inferior fleeces, bred Merinos with less wrinkles, and attended to their pasture. My flock increased to two thousand odd, all with better wool, finer and of a longer staple. Then, at the end of eight years, I again got £600 for my whole year's clip.

"But land and sheep were over-capitalized in those days; however, I survived. And I've had my polo for next to nothing and my fishing too! Now the only factor, and heaven knows it's a big one, which threatens wool and its future is synthetic fibres."

But wool has still the best combination of qualities of all textile fibres. It is, we all know, unsurpassed for warmth and the absorption of moisture, and its elasticity gives comfort, and enables it to recover its shape. A wool fibre can be bent backwards and forwards several millions of times without breaking, and it is not highly inflammable.

But even so, wool has had to take up the challenge of synthetics very seriously, a challenge met by scientific research and intelligent planning.

In South Africa a Wool Laboratory has been set up to investigate the qualitative and quantitative improvement of the wool clip. The farmer has to reduce overhead costs by improved methods; and where the Dominions study improvement from the producer's point

of view, the laboratories in Britain study from the manufacturer's. This has entailed research into the structure of the wool fibre itself, and its relationship to other textiles. A great many new facts have come to light. The molecular construction of the wool fibre, once considered too complicated to be discovered, is now well known. Through this knowledge has come a new treatment which makes wool truly unshrinkable.

"I think it's a sounder proposition than we optimists of the 'twenties looked forward to," said my farmer. "But then, although farmers have the traditional right to grumble, we are all optimists at heart."

And as I looked around me, I thought it could hardly be otherwise. The Berg was swathed in cloud, but the sun shone, and the roads were drying. After the wool was safely in the railway sheds we would come home and ride over the farm. And we would ride good ponies, because all young Natal farmers play polo. These tough young men, I thought, living their healthy outdoor life, must not be forced into the towns. If the 'Industrial Era' is coming to South Africa, let us comfort ourselves with the thought that there are vast spaces, unfenced and undeveloped, where men of unconquerable spirit can still trek, as of old, with their flocks of sheep.



From the author

Into Poonch

by RALPH ELWELL-SUTTON

In June 1943, four of us, on Army leave, made a nine-day journey on foot across the little Indian State of Poonch. They were days of temporary escape from war and the atmosphere of war; yet not complete escape. Perhaps that would be impossible anywhere in the world in a 20th-century war. In Poonch we remembered the war, because wherever we went we saw so few young men: only children and old men and women.

I remember one morning, resting in the shady stone-flagged forecourt of a farmhouse. Around us were mountains and pine forest and a great quietness. The air we breathed was peace. Nawab Khan, who owned the little farmhouse and was headman of his scattered village, spoke suddenly of the lack of young men to till the fields. In the further part of the house the women were going quietly about their daily work. What a strange and unaccountable world it must seem to them. For reasons so remote from their ordinary lives as to have almost no meaning for them at all a war begins many thousands of miles away, in a part of the world they have hardly heard of, and in a little while there are not enough young men to till the fields!

But in Poonch, among a friendly hardy people, fond of laughter, prizing independence of spirit, caring to be under obligation to

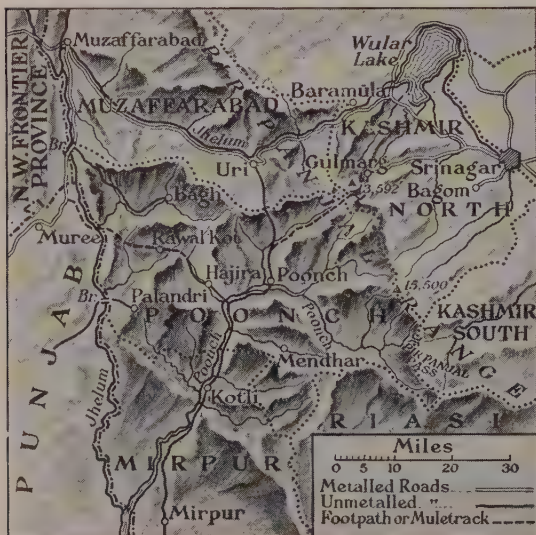
no man, it is impossible to think sombrely for long. It is the Poonchi's country more than anything else that has determined his character. His racial origins are not easy to trace. He often shows the lean hook-nosed features of the Afghan, and the rounder and softer features of the Kashmiri: as often they are blunt and regular like those of a plainsman from the Punjab.

Nor is there unity in religion. Though by far the largest community is Moslem, the Hindu community is not small, and since the State is now politically a part of the paramount State of Kashmir, it has a Hindu ruler, the Maharajah of Kashmir. There are also a few thousand Sikhs, descendants of emigrants from the Punjab and their converts. As a largely Moslem community under a Hindu ruler, Poonch does not, of course, differ from the State of Kashmir as a whole. Out of Kashmir's four millions in 1941, a little over three millions were Moslems. Hindus numbered about 800,000, Sikhs 66,000.

Poonch lies inside the western limits of Kashmir State, bordering on the Punjab and the Northwest Frontier Province, from both of which it is separated by the fast-flowing Jhelum River.

Only two bridges cross the Jhelum into Poonch, but at various points along the river there are ferries. We ourselves made an exciting and precipitate entry into Poonch by ferry at a point some twelve miles by rough mule-path from the main Murree-Kashmir road. The effect was to make us feel that between us and British India there was more than a mere physical frontier. This feeling was still stronger when nine days later we made our exit into Kashmir proper over the north-east frontier of Poonch. Here is the great barrier of the Pir Panjal range, part of which forms Poonch's eastern wall: peaks of 15,000 and 16,000 feet, and passes between negotiable only at certain times of the year.

The pass, which we finally achieved, at just below 12,000 feet, was well above the snow-line. Our first feeling was one of content. Difficulties, fears and forebodings were things of the past. Then came realization of a wider significance. We looked back across the woven tapestry of green mountains, receding fold upon



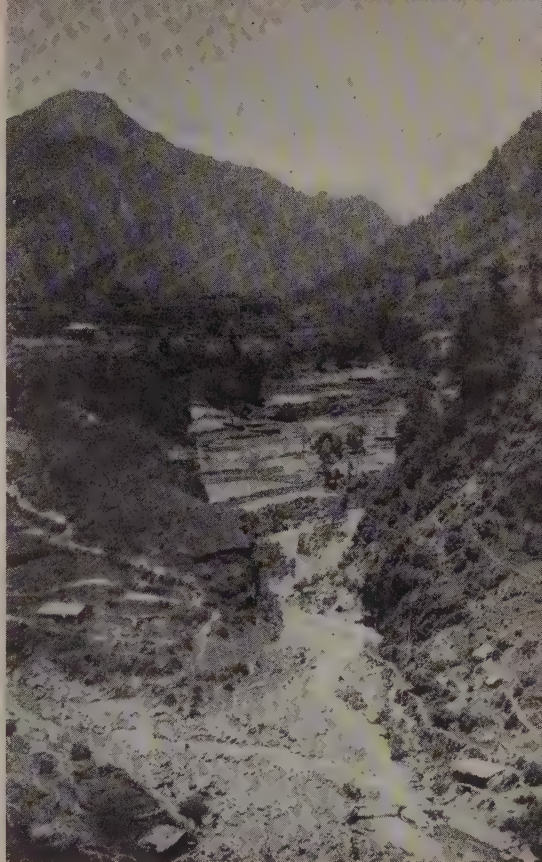
fold below us into the blue distance, and knew that suddenly we were outside it all, our thoughts and actions no longer conditioned by being a part of it, the umbilical cord cut and ourselves projected into an unfamiliar new world.

Poonch's unity is geographical; completed by lesser mountains in the north, and rough hilly country in the south, crossed by only one road suitable for motor traffic, though it is not metalled. From this initial unity comes the deeper unity which in the face of conflicting influences knits Poonch into an unmistakable and conscious whole; making the Poonchi aware and proud of being a Poonchi, hospitable to strangers, direct in speech and action, scornful of personal gain, quick to anger, if slighted outside his State. From it came the friendly honesty of the customs officer at the little customs-house above the ferry, who was greatly relieved to find that our bottles of kerosene and rum were unsealed and that consequently he need charge us nothing; the real hospitality of villagers in bringing us oil-lamps when, as we knew, lamp-oil was scarce everywhere in India, but clearly doubly so in an isolated village; the simple bluntness of peasants on the road, who would ask us where we were going and what was our business, without rudeness or inquisitiveness, for it was a natural question in a country where no man travelled except on business.

The Poonchi's independence of spirit asserts itself in many ways. His aim in life is to own his farmstead and piece of land in security. If he travels or seeks work outside his State, it is with this ultimate end in view. It is significant, too, that there is no accepted 'coolie' class in Poonch; for the Poonchi fundamentally is not the sort of man to carry another's load if that other is capable of carrying it himself. Once in Poonch, and our Punjabi coolies paid off, we had to find mules to carry our baggage.

Add to these qualities trustworthiness and physical hardihood: qualities that we found in great measure in our Poonchi guide, baggage-master, cook and bearer, Afsar Khan, without whom our journey could hardly have become a reality. As he was older than any of us, we had wondered if the journey would not over-tax his strength. We learnt soon that we, with our understood limit of twenty-five miles in a day, did not know the meaning of walking. A Poonchi limit would be at least double that distance.

The Poonchi has a country of well-watered valleys where the soil is deep and potentially rich: an excellent farming country. Yet he is



Arthur Warren

Approaching the snows of the Pir Panjal range, part of which forms the little State of Poonch's eastern wall. Its peaks rise to 16,000 feet and the passes are negotiable only at certain times of the year. (Right) A Poonchi Moslem. The largest community is Moslem but there are many Hindus and the State has a Hindu ruler, the Maharajah of Kashmir

Ralph Elwell-Sutton





Photographs by Ralph Elwell-Sutton

(Top, left) *The ferry over the river Jhelum by which the author's party crossed from British India into Poonch;* (top, right) *the town of Poonch.* (Above) *Public gardens in the town* and (right) *the gate by which they are reached.* (Opposite) *A Hindu temple in Poonch town*





a curiously bad farmer and remains poor. He is unprogressive and unambitious, content with little, provided it is his own. In his mountains and hills there must certainly be rich mineral deposits, but they remain untapped. Admitting his poverty, he sees the answer in the development of his roads and communications with the outer world. Whenever we went, this was his cry: "Give us metalled roads." He looks at Kashmir proper with its tourist traffic and glitter, and argues that the rest would follow. The Wazir of Poonch, Commissioner under the Maharajah of Kashmir, spoke of plans to open up and improve the mountain routes to the much-visited Kashmir hill station of Gulmarg. This would attract tourists from Kashmir. The plans would bear fruit, he hoped, after the war.

In Rawalakot, administrative centre of one of Poonch's four districts, the district magistrate doubted even if his country's soil was potentially rich. In any case, he said, his people really had not the right temperament for farming. He agreed that much could be done by education. "But," he reminded us, "you must not expect things to happen quite as quickly in this country as in your own." Metalled roads was the need, and communications with the outer world. First and foremost and before internal development.

We could understand this argument, but were saddened by its irony. We had seen that geographical isolation was Poonch's strength, the cement in the building. We saw that it would have to go. That was the meaning of progress, the force which had already brought all parts of the world so much nearer together. But we wondered how long Poonch's individuality would survive the impact.

After metalled roads would come the demand for the telephone. At present the telephone has arrived only at Poonch town, linking it with Srinagar, the capital of the whole Kashmir union. From the administrative centres of the other three districts you can telegraph only, on lines converging upon Poonch town. Railways have not yet reached Kashmir; but this, no doubt, is only a matter of time, and when they do arrive, Poonch sooner or later will surely be brought into the system. And as Poonch becomes gradually absorbed in something bigger than itself, perhaps richer, possibly happier, an old story will be told again.

As we approached the town of Poonch and saw it, dominated by its fort, against a background of

green mountains, and thrusting up from behind these a snowy peak like a white sail against the blue sky, we thought immediately of medieval towns in Middle Europe. Drawing closer, we could trace a curving wall following the contours of the hill below the old part of the town: and we began trying to identify the confusion of flat-roofed square mud buildings, tightly packed and seeming to grow out of the hill on which they crowded together. Now it was Spain, and the eastern part Morocco. But almost at once we began to pick out the *sikharas* of Hindu temples. We could see four or five at a glance: and then our eyes travelled across to a modern residential quarter where we could see big gardens and a number of ugly brick villas.

Inside we found it to be a town of gardens, trees, orchards and narrow winding stone-flagged streets. Its noisy little bazaar, festooned with shop-signs and pungent with spices, vegetables and drains, jostled with people. Ox-carts rumbled noisily over the rough flagstones. White sunlight threw hard geometrical shadows across the streets and against the walls of flat narrow-eaved houses. So the picture grew. Black windows staring from baked mud walls; trickling gutters dividing narrow alleys scarcely wider than a man; walled courtyards, seen through half-opened doors under square lintels, still and cool in the heat of the day.

All these things are now part of Poonch in our minds: with the laughter of schoolboys; the taste of raw country spirits; the fording of ice-cold rivers, and the artless singing of a young mule-driver; the quiet of the forest at night on the way up to a pass, and the firelight playing on the dark faces of an old herdsman and his sons; his two small grandsons appearing suddenly through the trees with a young rook in each hand which they roasted over the fire; the cattle standing motionless and ghostly on the edge of the ring of firelight; and the knowledge that these people were living as near subsistence level as was humanly possible.

But I do not know if with it all we were ever near the heart of Poonch, or how much of what

we felt and saw was only transitory. In this small part of the world, which had been almost changeless for centuries, we felt that the note now was one of change. It was as if we had arrived at the tail-end of an epoch. New forces were at work, below the surface as yet, and difficult to see in perspective; but strong. We could not foretell the future.



The Making of Russia

by G. A. BIRKETT

In considering the problems of Europe, we are apt to forget how deeply the present of any of the greater nations is conditioned by its past, in both its internal political and social structure, and its external relations. In our numbers for December of last year and March of this year, Miss C. V. Wedgwood examined the origins and growth of Italy and Germany; in this article, Mr Birkett traces the development of our Soviet ally from the tiny medieval principality of Moscow to the formidable Euro-Asiatic colossus that has in the past quarter of a century revolutionized its structure and become one of the major industrial and military powers of the world

MORE than a century ago Napoleon said, "The great Russian people will have its great age, and in its turn will hold the sceptre of glory." In our time we see the beginning of the fulfilment of this prophecy.

The elements of Russia's greatness are the energy and spirit of her young, rapidly increasing peoples and the rich and varied resources of a vast territory still only partly settled and exploited. The first step towards an understanding of her power is a study of the historical processes that have welded peoples and land into one whole.

These processes have been shaped to a large extent by a geographical background which in its simplest terms may be expressed in two words—plain and river. The closely inter-linked waterways sprawling across endless, undulating spaces have been the main channels of Russian history. Plain and river have accounted for its two most characteristic features, fluidity and expansiveness. Another factor of decisive importance has been the division of the plain into a northern zone of forests and a southern belt of steppe or open land.

The germ of modern Russia was Moscow. We find the earliest reference to it under the year 1147. It was then a tiny principality, consisting of a fortified centre on the site of the Kremlin, residence of the prince, a settlement around, where his followers lived, and a few square miles of land from which he drew his revenues. This small unit was one of many similar principalities or 'apanages' scattered over the north-centre of Russia in the 12th century. They all belonged to a loosely organized confederation known as the Grand Principality of Kiev, or the Kiev State.

The Kiev State was formed in the 9th century from groups of Slavs who for hundreds of years had been penetrating into the Dnieper valley from their original home north of the Carpathians. They were hammered

into one political whole by Scandinavian adventurers from the Baltic. The main axis of the state, Kiev-Novgorod, lay along one of the great trade-routes of Europe, and trade provided the economic basis on which the Kiev princes built up their power. Trade also brought this first Russia into contact with Constantinople and determined that its Christianity and the beginnings of its culture should be derived from the Greek East, not from the Latin West.

The movement of migration that had brought the Slavs into the Dnieper basin carried them on in two directions. From Kiev they made their way along the rivers crossing the black-land steppe until they reached the waters of the lower Don. But permanent settlement in the steppe was impossible, owing to disturbed conditions created by frequent invasions from Asia. Slav colonization was thus diverted to the forests of the North, from which it did not issue until the 16th century.

In the forest zone the Slavs came into contact with unorganized groups of Finns or Finno-Ugrians, a people who had spread from Asia across the whole of northern Russia before the beginning of the Christian era. According to Russian historians, the assimilation of the Finnish stock by the Slav produced the distinctive type of Great Russian.

The northern extension of the Kiev State was destined to form the second Russia when Kiev fell before the blows of the Tartars in the 13th century. This Russia of the forests was divided into two parts. The lands round the great lakes and on the rivers flowing into the White Sea and the Arctic were colonized and exploited from Novgorod. Merchants of Novgorod sent out parties of pioneers to hunt for furs or extract them from the Finns in the form of tribute. Novgorod set up an overlordship reaching as far as the Urals.

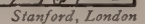
The area between the Volga and the Oka was settled by colonists who sought permanent



Stanford, London

From 1462 began the conversion of the

Having prevented Lithuania from annexing







Pictures from Rischgiltz Studios

(Opposite, top) *Nomadic Mongolian and Turkish peoples, who ranged the open plains of Northern Asia and in the 13th century conquered the greater part of present-day European Russia, used various forms of portable dwellings; one of them, the 'Kibitka', is shown in this old print;* (bottom) *Astrakhan, in the Middle Ages capital of a Tartar khanate, was conquered by Muscovy in 1554. The modern town has a population of 150,000, and through it pass vast quantities of grain, timber, and manufactured goods from Central Russia, oil from the Caucasus, and raw cotton and fruits from the Central Asian republics of the Soviet Union. This engraving is dated 1816. (Above) Smolensk, in 1819, seen from the banks of the Dnieper. It is one of the oldest of Russian towns, known from the 9th century. Owing to its key position, it was disputed for centuries between Muscovy and Lithuania-Poland, and served as a strong centre of resistance to Napoleon's armies in 1812 and the German invaders of our own time. (Right) The fantastic Cathedral of Basil the Blessed on Moscow's Red Square, built by Tsar Ivan IV to celebrate the capture of the Tartar capital of Kazan in 1552. To the left is one of the towers of the Kremlin and in front the river Moskva*





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J. Allen Van





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Novgorod, Muscovy proceeded to challenge the Lithuanian hold on the Dnieper valley, the backbone of the old Kiev State, which the Volga-Oka princes had never ceased to regard as their inheritance. Thus began the long-drawn struggle for the so-called 'western lands' which, after the union of Lithuania with Poland in the 16th century, developed into the great Polish-Russian quarrel.

Tsar Ivan III succeeded in throwing the Lithuanians back from their most advanced positions close to his capital. His successor, Vasily III, conquered the key fortress of Smolensk (1514). These gains were to be lost for a time in the 17th century, but they marked the beginning of a trend in Moscow policy that has persisted to the present day.

The widest expansion of Muscovy in the 16th century was towards the East, at the expense of the Tartar khanates of Kazan and Astrakhan, which controlled, respectively, the middle and lower Volga, and for several centuries had checked Russian advance in that direction. In the 1550's Tsar Ivan IV conquered both Kazan and Astrakhan. This great break-through had far-reaching consequences. The Volga opened a trade-route to the Caspian and the Middle East. Its tributary, the Kama, was the direct road to

The Kremlin, ancient core of Moscow (opposite, top), medieval citadel, residence of princes and centre of church organization, is now the main headquarters of Soviet Government. Its walls date from the 15th and 16th centuries. Round it is now developing the new Moscow, with fine embankments along the river Moskva, wide streets, and reconstructed bridges; (bottom) the Red Square, one of Moscow's largest open spaces, adjoining the Kremlin, has served as a public forum and market-place, and been the scene of many historic events in the life of Moscow. (Above) Old St Petersburg. Peter the Great laid out his new northern capital on a plan, using to the best advantage the broad sweep of the river Neva. Many fine Government buildings arose in the 18th century, and the Italian architect Rastrelli built the Winter Palace (below), used until the Revolution as the city residence of the Tsars. The Palace is now a State museum

Paul Popper



Siberia. On either side of the Volga lay vast tracts of land suitable for agriculture, a second great outlet for the population of the central area.

Assimilation of the trade-route to the south, and of the steppes, depended on keeping at bay or bringing under control numerous nomad peoples, former vassals of the khans. The advance of Russian colonization and the search for a frontier went hand in hand. But it was not until the later 18th century that Russian control of the area between the Volga, the Urals and the Caspian was finally established.

Meanwhile a similar process was taking place west of the Volga, where for centuries the frontier had lain on the edge of the forest zone, just south of the Oka. The steppe beyond this line, with its sparse and very mixed population of nomads, was dominated, though not permanently held, by a third Tartar khanate, which had its base in the Crimea and in 1475 became a vassal of the Ottoman Sultans at Constantinople. The Crimean Tartars frequently raided the settled territories of Muscovy, driving off large numbers of inhabitants to be sold as slaves in the Near East.

Muscovy staved off the attacks of the Tartars, and later moved south over the steppe by throwing out successive lines of fortifications. These lines were based on strong points established in the relatively sheltered valleys of the rivers flowing from north to south, linked by chains of blockhouses or by continuous earthworks. The areas so protected filled up rapidly with peasant settlers. In the safer sectors colonization went ahead of the state fortified frontier, which served as a base on which to withdraw when trouble came

over the steppe. Further out than the most advanced settlers ranged the adventurers, escaped serfs, and fugitives from the law who formed the Cossack communities on the lower Don and Dnieper, often as sharp a thorn in the side of the state as the Tartars themselves.

Progress across the steppe was slow, but by 1660 a more or less continuous and solid frontier had been established that took in the upper half of both the Don and the Donets.

During the troubles that disintegrated the internal life of Muscovy from 1604 to 1613 the fortunes of Poland in the long struggle with her eastern neighbour reached their highest point. Polish forces not only reconquered Smolensk and other parts of the 'western lands' that Ivan III and Vasily III had won for Muscovy, but occupied Moscow for a year, and it seemed possible that the son of the King of Poland would become tsar. The Muscovites recovered and drove out the invaders, but had to leave Smolensk in their hands.

After the union of Lithuania and Poland in 1569 the lands on the middle Dnieper fell under direct Polish control. The population of the area by that time already spoke the form of Russian that was known later as Ukrainian, and in certain other respects had become differentiated from the Great Russians of the centre and north, though sharing with them adherence to the Orthodox faith. Lithuanian rule had been extremely tolerant, but the Poles began to introduce their own institutions, including serfdom. In 1648, with the support of the Cossacks of the lower Dnieper, the Ukrainians rose against Poland. When, after some initial successes, things began to go badly with them, they turned to Tsar Alexis of Muscovy and asked to be taken under his protection.

The Cossacks, adventurers, outlaws, and escaped serfs from Central Russia, thrust south in advance of state frontiers, establishing themselves on the rivers Dnieper and Don. When taken into the

Russian Empire, they distinguished themselves as cavalry in every war, including the present. (Opposite)

One of Catherine II's first steps after the conquest of the Crimea was to

build a fortress commanding the fine natural harbour on its south-western coast, from which developed the great naval base of Sevastopol



This was a turning-point in the history of Russia, and indeed of all eastern Europe. The issue was whether the rich and strategically vital Ukraine should remain under Poland, contribute to the further building of Muscovy's power, or perhaps fall to a third competitor, Turkey, by that time in control of the Black Sea steppes. Alexis and his advisers took their time to weigh up the situation, but at last acceded to the request of the Ukrainians.

This decision led inevitably to war with Poland. The balance of power between the rivals had changed fundamentally in the past half-century. Muscovy had recovered from the Time of Troubles and made some progress in reorganizing her military forces on Western lines. Poland, on the other hand, had entered a period of decline that was to lead to her disappearance from the map of Europe. She was attacked simultaneously by the Swedes. The war dragged on for thirteen years (1654-67) and by the Truce of Andrusovo Muscovy finally regained Smolensk and acquired all the Ukraine east of the Dnieper, with Kiev on the right bank of the river.

Peter the Great began with a thrust to the south, and by his conquest of the Turkish fortress of Azov at the mouth of the Don seemed on the point of establishing Russia on the Black Sea, but this foothold had to be given up later. Peter's real service in the expansion of his country was the conquest of the Baltic coast from Riga to Viborg, including both those ports, and the acquisition of the long-desired 'window onto Europe'.

In order to achieve this, he had to challenge the Swedes under their most brilliant military leader, Charles XII. The Great Northern War lasted from 1700 to 1721, but long before

its end the issue had been decided at Poltava in 1709. Russia had her new capital of St Petersburg at the easternmost tip of the Gulf of Finland, with its guardian fortress on the island of Kronstadt, and a strong fleet. She had taken Sweden's place as the dominant power in the Baltic.

This was the first appearance of Russia—now the Russian Empire—on the broad stage of European politics, and it startled the West. Henceforth Russia had to be taken into account in every political move and combination. Her armies ranged over northern Europe and no German can forget that in 1760 Russian Cossacks occupied Berlin.

Territorial gains in the second quarter of the 18th century were relatively small. In 1739 the Empress Anne forced the Turks to yield a further belt of the steppe east and west of the Dnieper elbow, and Peter's daughter, Elizabeth (1740-60), added a narrow strip to the bridgehead he had established in Finland.

The great age of Russian expansion in the 18th century, the reign of Catherine II, brought at length the achievement of the historical aim in the south: a safe permanent frontier, and the recovery of the last of the 'western lands' from Poland—with a great deal more that could not be justified on historical or ethnographic grounds.

Two wars with Turkey (1768-74 and 1787-1792) gave Russia all the Black Sea coast from the Dniester to the Kuban, including the Crimea, where a strong naval base was soon set up at Sevastopol. Russia's appearance as a powerful factor in the Black Sea caused as great a revolution in the politics of south-eastern Europe as her emergence in the Baltic under Peter the Great had produced in the North.

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J. Allan Cash

*Paul
Popper*



The three partitions of Poland (1774, 1793, 1795) gave to Russia the Duchy of Kurland (on the Baltic, south-west of Riga), the whole of White Russia and Lithuania, all the Pripiet basin, and the remainder of the Ukraine, except Galicia. The total area of this new territory was over 180,000 square miles, and its population 6 millions, mostly Ukrainians and White Russians, but including also many Poles.

The western frontier of the Empire was now contiguous with the boundaries of Prussia and Austria. A fourth partition of Poland carried out at the Congress of Vienna in 1814 added to Russia the so-called 'Congress Kingdom', the central core of Poland proper, and thrust the Russian frontier into the heart of Central Europe, to within 200 miles of Berlin and Vienna.

The Georgian Military Road, Russia's 'Khyber Pass', built in the first half of the 19th century, crosses the main Caucasian chain. In modern times it has become a favourite tourist route to Transcaucasia. The Caucasus has been called an 'ethnographic museum'. Many of its peoples are comparatively recent comers, thrown up by successive waves of invasion which have passed north and south of the Isthmus. The Georgians, of whom there are about 1½ millions, have been established in the fertile valley of the river Kura for over 1500 years

Two other developments in the reign of Alexander I similarly rounded off for a century to come the extreme northern and southern sectors of the western frontier. In 1809 Alexander wrested from Sweden the whole of Finland, thus securing complete control of the Gulf of Finland and of the eastern coast of the Gulf of Bothnia, which Peter the Great had failed to achieve. In 1812 he forced Turkey to yield Bessarabia, and so reached the mouth of the Danube.

Although the western frontier remained unchanged through the 19th century, repeated attempts were made to extend it, at the expense of Turkey. Russia's ambitions in the Balkans involved her in three wars with the Turks, one with England and France, and at least one major international crisis, and created that hostility between Russia and her western neighbours which proved an important factor in bringing about the great struggle of 1914-18.

But the main force of Russian expansionism in the 19th century was diverted to the East—first to the Caucasus, then to Central Asia, later still to the Far East.

In the reign of Catherine II the Russian line facing the Caucasus was based on the rivers Kuban and Terek. The foothills and the main chains were occupied by doughty, independent mountaineer peoples of varied origin, who constantly raided the Russian settlements on and behind the river-line. South of the Caucasus mountains, in the fertile valley of the Kura, lay the Christian kingdom of Georgia, and to the west of it several smaller Christian states. Beyond Georgia, Transcaucasia was divided between Turkey and Persia.

Towards the end of the 18th century Georgia, after long struggles against Turks and Persians, placed itself under the protection of Russia, and in 1801 was annexed to the empire, to be followed a few years later by the other Christian states. The conquest of the mountaineers of the north cost the Russians a long series of frontier campaigns, which ended only in 1859. The southern belt of the Caucasus was won from Persia (1804-13 and 1826-8) and Turkey (1828-9 and 1877-8).

Russian penetration into Asia began as far back as the 12th century, when pioneers from Novgorod crossed the Urals in their ceaseless quest for furs. The real advance



J. Allan Cash

In old Tiflis, capital of Georgia. It has a population of 300,000, and is all that the tourist could wish for as a mixture of east and west, old and modern

eastward set in after Muscovy had disposed of the khanate of Kazan and opened a direct route via the Kama, which traders, colonists, fur-hunters and Cossack adventurers at once began to exploit. In 1586-7 Russian fortified settlements appeared at Tiumen, on the river Tura, Tobolsk, at the junction of the Tobol and the Irtysh, Berezov and Obdorsk, both on the lower Ob. Turning east, parties of pioneers sailed up the Ob and by its right-bank tributaries crossed to the Yenisei, where settlements were planted at Yeniseisk in 1619 and Krasnoyarsk in 1628. Tributaries of the Yenisei led eastward into the basin of the Lena. By 1632 the mouth of that river had been reached, and a post had been set up at Yakutsk, on its middle course. In 1638 the first Russian settlement was founded on the Okhotsk Sea. In 1648 a band of Cossacks, led by Dezhnev, discovered the Bering

Straits, anticipating by 80 years the explorer whose name they now bear.

The interest of the Russians in Asia might have remained confined for a long period to the forest belt and its rich resources. But south of their attenuated line of settlements lay a broad stretch of open steppe occupied by restless nomad tribes who constantly threat-

ened their security. Thus at an early stage they found themselves drawn into a defensive offensive, similar to that which in European Russia carried their frontier to the Black Sea.

The first step was taken in 1593, when the post of Tara was set up on the Irtysh, about 250 miles above Tobolsk. A few years later a similar move was made much further east,

(Below) The vast Black Sea steppe was broken only by 'kurgans', burial mounds left by successive waves of invaders on their passage from Asia to Europe. (Bottom, left) Uzbeks, one of several Turkish peoples who now form the Trans-Caspian republics of the Soviet Union, number 4 million; (right) Tajiks, an Iranian people who extend beyond the borders of the Soviet Union into Afghanistan



*chitra Studios
S.C.*



with the foundation of Tomsk and Kuznetsk, both on the river Tom, a tributary of the Ob. Successive thrusts in both these quarters, linked by lines of fortifications, carried the frontier steadily forward, until by the middle of the 18th century it took in the whole basin of the upper Ob and all the land north of the Irtysh as far as Omsk (founded 1719). Thence it passed due west to the river Tobol and to Orenburg, where it linked with the defensive system thrown out south of the Kama and the Urals. Thus the whole of Western Siberia, including a vast area of black land suitable for agriculture, was brought within the pale of the Russian state.

In the first half of the 19th century the frontier advanced, still at the expense of the steppe nomads, until it rested on the Caspian, the Aral Sea, and Lake Balkhash. South of this line lay the khanates of Bukhara, Khiva, and Kokand, of which the steppe nomads had been vassals. These were conquered in a series of organised military campaigns carried out in the third quarter of the century. Russian expansion at last reached its limit on the borders of Afghanistan and Persia.

The thousand years of growth traced briefly above had brought together into one political unit territories with an area of over eight million square miles. Already in 1800 Russia had a population of 36 millions, larger than any other European state; by the end of the 19th century it had increased to 130 millions, or more than twice that of Germany, then second in the number of its people. But preponderance in size and population did not bring a corresponding increase in external power and prestige.

The part Russia had played in the Napoleonic wars, following her amazing expansion in the 18th century, gave her the reputation of the 'Colossus of the North'. But how false that reputation was the Crimean War proved. External expansion had immensely



J. Allan Cash

Symbolic of Russia today: pre-war view of Kharkov; headquarters of economic organizations which control the metallurgical, engineering, and mining industries of the Ukraine

outstripped internal development, both political and economic. The twin relics of medievalism, serfdom and autocracy, continued to stifle initiative and cramp the exploitation of the vast resources which could indeed have made Russia the power she only seemed to be.

It is true that some progress took place in the assimilation of those resources during the 19th century. Internal colonization continued to people new lands, rich for agriculture, in the south, where a great export trade in wheat soon grew up. Industry developed, especially in the last third of the century, when the coal and iron of the Ukraine were opened up. But how little had been achieved in raising Russia's power to that of other large states became apparent in the war of 1914-18, which, besides revealing internal weaknesses almost as glaring as those shown by the Crimean War, and leading Russia into the Revolution, lost her a large part of the western border territories she had won in the 17th and 18th centuries.

The measure of progress made by Russia in the past twenty-five years, and of her potentialities for the future, is given by her performance in the present war,

How We are Governed

III. The Party System

by QUINTIN HOGG, M.P.

In this, the last, article of his series, Captain Hogg describes the growth and working of the two-party system which has existed in our country in one form or another since 1641 and has played so large a part in maintaining the continuity of our political life without disastrous convulsions and interruptions. Captain Hogg explains the meaning of a 'Three-Line Whip' and other mysteries of the House of Commons which may sometimes puzzle the ordinary layman. In his summing up, he gives it as his belief that the success of the two-party system, as of many other of our institutions, would not be possible without an overriding devotion to their country on the part of politicians and the electorate they represent

"AFTER ten months of assiduous toil", writes Macaulay in his *History of England*, "the Houses in September 1641 adjourned for a short vacation. The day on which they met again is one of the most remarkable epochs of our history. From that day dates the corporative existence of the two great parties which have ever since alternately governed the country. . . ."

"When in October 1641 the Parliament reassembled after a short recess two hostile parties, essentially the same as those which under different names have ever since contended for the direction of public affairs, appeared confronting each other. During some years they were designated as Cavaliers and Roundheads. They were subsequently called Tories and Whigs. . . . It would not be difficult to compose a lampoon or a panegyric on either of these renowned factions. The truth is that though both parties have often seriously erred England could have spared neither."

"If in her institutions, freedom and order, the advantages arising from innovation and the advantages arising from prescription have been combined to an extent elsewhere unknown we may attribute this happy peculiarity to the strenuous conflicts and alternate victories of two rival confederacies of statesmen, a confederacy zealous for authority and antiquity, and a confederacy zealous for liberty and progress."

* * *

Political parties have seldom had a good Press. They have been denounced as conspiracies or caucuses. They have been abused as purely factious confederations always putting their purely sectional interests before that of their country. Froude in his *Life of Dis-*

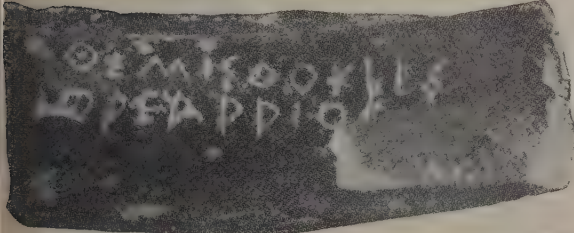
raeli refers to them as a form of "concealed civil war".

The fact is, however, that Party is one of the characteristic expressions of political liberty and parties have always appeared on the rare occasions in human history when free societies have flourished and human Government has proceeded on the basis of discussion rather than force. A few years after 600 B.C., almost as soon as its first free political institutions were designed, politics in the infant republic of Athens were disputed between two parties, the one Conservative and aristocratic in tendency based on the landed interest, and known from this fact as 'the men of the Plain', the other mercantile and progressive based on the middle class and the artisan, and known from their interest in overseas trade as 'the Men of the Coast'. "The two great parties", says J. B. Bury, "were those who were in the main satisfied with the new Constitution, and those who disliked its democratic side and desired to return to aristocratic Government."

Of these two great parties whose struggles in one form or another can be traced right through Athenian history it might have been said, as Macaulay wrote of the two great English parties, "The distinction which then became obvious had always existed and always must exist. For it has its origin in diversities of temper of understanding and of interest which are found in all societies. Everywhere there is a class of men who cling with fondness to whatever is ancient, and who, even when convinced of overpowering reasons that innovation would be beneficial, consent to it with many misgivings and forebodings. We find also everywhere another class of men sanguine in hope, bold in speculation, always pressing forward, quick to discern the imperfections of

whatever exists, disposed to think lightly of the risks and inconveniences which attend improvements and disposed to give every change for being an improvement. In the sentiments of both classes there is something to approve. But of both the best specimens will be found not far from the common frontier. The extreme section of one class consists of bigoted dotards. The extreme section of the other consists of shallow and reckless empirics."

In all countries the normal and healthy



On Tuesday, 2nd May, 1944, the House will meet at ~~10.30~~

Budget Resolutions; Report stage

National Loans Bill; 2nd Reading.

Your attendance by ~~10.30~~ o'clock is particularly requested.

On Wednesday, 3rd May, the House will meet at ~~10.30~~

A debate will take place on a Government Motion relating to
Water policy.

National Loans Bill; Committee.

Your attendance by ~~10.30~~ o'clock is particularly requested.

On Thursday, 4th May, the House will meet at ~~10.30~~

Pensions (Increase) Bill; Conclusion of Committee and remaining stages.

National Loans Bill; Report and 3rd Reading

Police & Fireman (War Service) Bill; Committee and remaining stages.

Divisions will take place, and your attendance by ~~10.30~~ o'clock

and throughout the Sitting is particularly requested.

On Friday, 5th May, the House will meet at ~~10.30~~

Supply; Committee (5th Allotted Day)

Ministry of Transport Vote will be considered.

Your attendance by ~~10.30~~ o'clock is particularly requested.

JAMES STUART.

P.T.O.

Party is one of the characteristics of political freedom. Party politics were well established in Athens as early as the 6th century B.C. Above is a voting tablet voting for the exile of Themistocles, the Athenian Radical leader. Below it is a Government Whip of 1944. (The hours at which the House of Commons meets are secret and have been obliterated.)

party structure into two parties, one Conservative and the other Radical, has tended to break down into more numerous groups. In the Athenian polity the Plain and the Coast was joined by a third faction, 'the Hill'—which promptly proceeded to install a dictator. In the Roman republic the original division between patrician and plebeian, based on class, finally developed into a three-party system, the People's Party, the Conservative and the Mercantile—whose inability to form a stable society was one of the contributory causes of the dictatorship of the Caesars. In continental democracies the fissiparous tendency of political parties has been carried to far greater lengths, but in each case a prolonged or radical departure from the two-party system has ultimately proved fatal to the liberties of the society concerned.

It is among the English-speaking peoples that the party system has reached its greatest development, and it is among these, both here in the Dominions and in the United States, that on the whole the two-party system has come to be treated most consistently as the Norm.

Although political parties in our country can be traced to the period immediately preceding the Civil War, the modern party system dates from the period immediately before and immediately after the Reform Bill of 1832.

In the General Election of 1831 the Whigs raised funds to finance candidates who advocated reform, thus instituting the fundamental characteristic of the modern political party,—the party fund. The Conservatives followed in 1834–5 when a similar central fund was raised, and a Conservative Party Organizer appeared under Peel in the person of Lord Granville Somerset.

The second feature of the modern party is the local association. This feature too came into being as the result of the passage of measures of Electoral Reform. The first Reform Bill of 1832 added approximately 217,000 voters to the register, and there immediately sprang into being a number of local Registration Societies acting in the interest of each party, whose chief function was to secure the registration of voters likely to be favourable to the party cause and to oppose the registration of voters of the other faction. The registration of favourable voters continues to be a considerable preoccupation of the modern party Agent, even in constituencies where the electorate is too large to enable the result of an election to be greatly swayed by this method.

Two further features of party organization remain to be added, the Central Convention



or National Party Conference at the apex, of the pyramid and the Ward Committee or caucus into which the local association is subdivided at its base.

These features were both originally of American origin and owe their introduction in this country to the work of Joseph Chamberlain (at that time a Radical) and his Birmingham manager, Schnadhorst, who introduced the Ward system into this country after Disraeli's Reform Bill of 1867 and helped to form the National Liberal Federation in 1877. The Conservatives followed soon afterwards with the National Union of Conservative and Constitutional Societies which is the direct parent of the present party machine.

The Labour Party presents several distinctive features and has a slightly different history. It originates in several attempts by the Trade Unions to get separate representation for manual workers within the framework of the existing party system. The first of these attempts was in 1868 and was wholly unsuccessful. The modern Labour Party derives from the original Independent Labour Party (formed in 1891) and the Labour Representation Committee formed at the end of 1899 and renamed in 1906 the Labour Party.

Its Trade Union origin can still be very clearly seen in its constitution. Like the

other parties it has local associations and Ward Committees, but the real control lies not in the hand of individual members acting democratically, but with the corporate members, the Trade Unions, and the Cooperative Societies, the latter formally affiliated in 1927.

These practically control the machine. "The vote at Labour Conferences", says the *Economist* (May 13, 1944), "is determined by the Trade Unions according to a crudely representative card system. The Labour politicians as distinct from the Trade Unions now get the worst of both worlds. Normally the affiliated Trade Unions are not even affiliated to the local Labour Parties on the basis of individual membership but *en bloc* to the Labour Conference itself. Genuine local Labour membership is minute compared with the votes cast at the Conference."

No account of the organization of the party system would be complete without reference to the way in which the parties are organized inside Parliament. The origin of this organization is lost in time. Presumably the various opposition groups from Stuart days must have had some internal organization of which no trace has remained. The modern system probably dates from the 18th century and probably numbers George III among its originators since he formed a separate group



Opposite] Hogarth's version of 'Burning the Rumps' (the remnant of the Long Parliament which expired in 1660) at Temple Bar. Burning and hanging in effigy was a regular feature of popular politics until the grey hand of the Corrupt Practice Acts made them serious and dull. Only Guy Fawkes Day nowadays preserves a memory of the orgies of the past. (Above) Party politics before the Reform Bill: Fox whipping Pitt, a political cartoon showing members of the Cabinet and Leaders of the Opposition. The cartoonist is one of the most characteristic figures of English political life, and by popularizing politics did much to pave the way for democracy. (Right) The ceremony of the hustings took the place of nomination-day until comparatively recently. Both candidates appeared on the same platform before a crowd and addressed the mob. After this a show of hands was taken and the losing candidate would formally demand a poll. As others besides electors could attend the hustings and enjoy the somewhat bacchanalian atmosphere, the hustings were another formative influence in the growth of democracy, although proceedings were often disorderly and never dignified



Pictures from Rischgiltz Studios



The Westminster election of 1784—the most famous by-election held before the Reform Bill in the 18th century. London elections were often the scene of wild disorder. In some constituencies, such as Westminster, manhood suffrage prevailed, and provided a rare example of democracy in a world of privilege. In this picture a standard bearer of the Parish of St Margaret is engaged in a fierce battle. Note the fox's truck, emblem of Charles James Fox, in the hats of the Whig supporters.



THE RIGHTS OF WOMEN - AN EFFECT OF FRANCHISEMENT

Pictures from Rischgitz Studios

(Top) A Realisation picture of the scene at the bank of St Paul's Church, Covent Garden, during the Westminster by-election of 1866. The life-boat on the extreme left symbolizes the fact that one of the Tory candidates was an admiral. (Bottom) Finally, a fictitious impression of the huddings in which a 19th-century feminist imagines the effect upon men of the women's vote. This vote, of course, not actually granted till after the Suffragette agitation in the early part of this century

in the House of Commons known as 'The King's Friends'. This group was kept together by something like a modern party organization which apparently sent out written requests or 'whips' to attend. Discipline was certainly enforced by means of what would now be called corruption under the Patronage Secretary of the day. It is probably more than a coincidence that although the days of corruption have long since passed, the Chief Government Whip of the present time is still known by the title of 'Patronage Secretary'.

The modern Parliamentary party is organized through a number of officials known as 'Whips' (the metaphor, of course, is from the hunting field). Both the Labour and the Conservative parties have full party meetings with executive committees, but particularly in the Conservative Party the normal organization and discipline is left to the Whips. When the party is in office these are organized under the Patronage Secretary and usually enjoy the minor ministerial offices of 'Junior Lords of the Treasury'. As Ministers they are entitled to a seat on the Front Bench, but they are not charged with executive functions and seldom speak except to move formal motions or when their personal conduct is called into question. When the party is in opposition the Whips go unpaid, but their existence is formally recognized by the allocation of a separate room for their use equal in size and importance with that enjoyed by the Government Whips.

As organizers of the party machine inside Parliament the Whips are the 'usual channels' (by which name they are invariably referred to in public) whereby one party negotiates with another about the conduct of public business and the allocation of Government time, and whereby the leaders of a party keep in touch with the opinions of their own rank and file and with other movements of opinion inside the House. The Whips are also responsible for the attendance of members at the time of important divisions. Contrary to what is generally supposed, the Whips do not normally bring direct pressure to bear on a member who wishes to vote against his party, and a threat of action against him is almost never made. The convention is that when a member desires to vote against the party he notifies the Whip, who will try and persuade him by reason not to do so or at least to abstain from voting at all. Where the Whip recognizes that the revolt is general he will generally be empowered by the party leaders to offer some concession. Direct threats of discipline and promises of advancement are not resorted to, certainly in the Conservative

Party, but, in theory at least, a member who habitually votes against the party will lose his membership of the party, and faithful service if combined with ability seldom fails to secure the reward of office.

Every week each Whip's office issues a statement of business to party members. This statement is also called 'The Party Whip', and withdrawal of the right to receive it constitutes formal excommunication from membership of the party. The 'whip' also contains an exhortation to be present but never a direct request to vote in a particular way.

The 'written whip' always employs the following formula in peace-time: "On Tuesday 2 May 1938 the House will meet at 2.45 P.M. to discuss (say) the Budget Resolutions Report stage. Your attendance by (say) 4 o'clock is particularly requested." Where divisions are likely this is also stated. The degree of importance attached to the member's attendance is indicated by the number of lines with which the words of request are underscored. If no lines are present it may be that his presence is positively unnecessary. One underlining represents business of less than the usual importance. Normal business secures two lines, while three lines indicates that the reason for the member's absence will certainly be made the subject of inquiry.

The present form of the whip is of comparatively recent date and developed quite gradually. Until quite modern times the whip took the form of a personal letter written to every member in ink and signed by the Chief Whip or the leader of the party. Such a personal letter at the beginning of the session, signed by Edward Marjoribanks (afterwards Lord Tweedmouth), is in my possession. In the Chief Whips' Office at 12 Downing Street is a curious ink-written whip of the time of Disraeli (by which time the modern form was almost fully developed) with no less than four lines underneath the exhortation and the additional phrase "your attendance is *most earnestly* and particularly requested".

In addition to the written statement of business both Government and Opposition Whips 'keep doors' throughout the sitting when divisions are expected and try to dissuade their supporters from leaving the House. Sometimes, particularly at the dinner hour in peace-time, they find this difficult.

From this extremely sketchy account of the party system in Great Britain certain general conclusions may be drawn.

When we think of the institutions of our country we are apt to conjure up pictures of Church and King, Lords and Commons, Judges and Justices of the Peace, County

Councils, Mayors and Corporations, Armies and Fleets, candidates and elections, Cabinets and Civil servants. But these are only the legal institutions. They are skeleton and bone, not flesh. The truth is that Party is as vital a political institution in this country as Parliament. Without Party, Parliament would wither and decline into a debating club without responsibility, or a *Reichstag* whose business it would be to register approval of the decisions of a dictator or a bureaucracy.

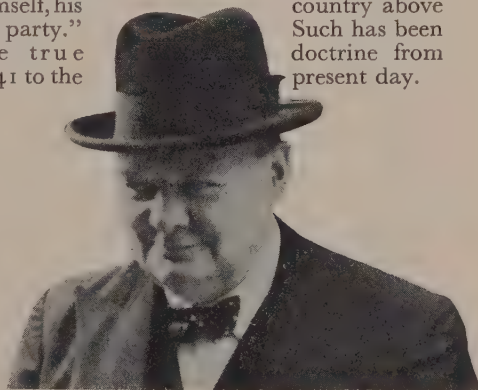
Party within Parliament is the instrument whereby Government retains control of its time and gives coherence and meaning to its policy. In the country at large Party is the means whereby the public exercises its control over Government. There are always people whose vote at an election is determined by trivial or insignificant considerations. In such minds the great issues of national policy are outweighed by some personal prejudice, interest or predilection. Yet if these were to form the majority it would not be possible to deduce from the result of an election any general inference as to the will of the people on the main issues which it had to determine. Between, say, an anti-vivisectionist, a member of the Farmers' Union and a representative of a particular religious denomination there could be no common policy. A House of Commons elected out of such materials would become a heterogeneous collection of cranky individuals or delegates from various pressure groups free to develop its own programme and to allot office to any combination of its component elements without reference to the opinions of the electorate. A general election yields intelligible results simply because the people is asked a simple and intelligible question. The electors are required to choose not between the individual merits of about 2000 candidates or to express opinions about an uncoordinated series of individual measures. Their choice is between one of two or three possible teams of potential ministers and between one of two or three coherent legislative programmes. Party is the means whereby this is done. Party is the instrument for the formulation of issues, for the selection of candidates, for the promulgation of policy. In times of emergency coalition between the parties provides the necessary structure upon which national unity can be built in this country. In times of peace it is the means whereby the demand for reform and the criticism of it can be canalized into the channel of orderly discussion. On the whole the system has served its purpose well.

It may be that the nature of party warfare has often served to obscure its necessary function, that the shifts, ruses and devices of electioneering tend too often to lower the

standard which public servants should set themselves, that the need for clear cut contrasts on election platforms tends too often to denigration and abuse of the opposite side. But all this is on the surface and the necessary check to the evils engendered has long been recognized. This check is the so-called 'floating vote'. It has never been true that all the politically-minded have belonged to one party or the other. If it ever became true party politics would degenerate into a feud between Capulets and Montagues. The 'floating vote' is as essential to political life in this country as the party system itself and serves to prevent party from degenerating into faction.

"It is also to be noticed", writes Macaulay in the passage quoted at the beginning of this article, "that these two parties have never been the whole nation, nay that they have never taken together made up a majority of the nation. Between them has always been a great mass who has never steadfastly adhered to either, which has sometimes remained inertly neutral and has sometimes oscillated to and fro." The political life of a free country is composed of an infinitely intricate system of counterpoises of which the interaction of the great parties forms an essential but not an all-sufficing part. If the whole were not given form and meaning by the love of country, it would soon degenerate into the chaotic and corrupt alliance of factions and caucuses which characterized the political life of the Third Republic in France.

"A good party man", said Mr Churchill in the House of Commons when Sir Kingsley Wood died, "is one who puts his party above himself, his country above his party." Such has been the true doctrine from 1641 to the present day.



Fox Photos

"I am a convinced supporter of the Party system", the Prime Minister recently declared, and added that it is easy for an individual to move from Left to Right, but to cross the floor needs consideration: "I am well informed on this matter, for I have accomplished that difficult process not once but twice".

Remembering Venice

by L. P. HARTLEY

On the map Venice is pear-shaped, or, to be more exact, the shape of a flat fish; and its course is set in a north-westerly direction towards the mainland. But there is not, I should think, another city in the world where cartography and actuality bear so little relation to each other. Once inside Venice, one's sense of direction sickens from a surfeit of possibilities, and then dies.

I lived there for many years, but I doubt if even now I could find the nearest route from the Piazza to the station. Follow the crowd, they say, and the advice is not so foolish as it sounds. On the wettest day there is always a crowd in the streets of Venice, moving slowly towards an objective; following it will take you to some centre, to the Piazza, to the Rialto Bridge, to the Accademia, to the Campo San Polo, to the Campo Santa Margherita; at any rate it will not lead you to a dead end, or to a canal without a pavement, as frequently happens when you strike off on your own. The crowd might even take you to the station, a destination which, if it meant I was leaving Venice, I always viewed with a heavy heart. But then of course you would be going in a gondola, with your luggage piled up behind, and funereally draped in the folds of a black cloth, if you had a private gondola, as I had.

Most Venetians and many visitors who are familiar with Venice look askance at the gondola as a means of getting about the city. It certainly has its drawbacks. On very windy days, which often in Venice means wet days since the *siroccale* nearly always brings rain, only the boldest gondolier will venture forth without a second oar; and though he nearly always knows some friend or connection of his family who will oblige, the lad is not always forthcoming at a moment's notice. And if you persuade him to go by appealing to his pride, or by threatening to find a braver, stronger oarsman, his unwillingness may turn out to be justified; for a gondola is sensitive to a puff of wind, it is a fair-weather craft, and its very ability to turn in its own length and slide round the sharpest bend is a terrible handicap on a windy day. Nor, probably, will the passenger have the slightest idea what it means to the gondolier if his precious craft should sustain a scratch, a bump, a shock even: far better that all the passengers, and indeed

the gondolier himself, should fall headlong in the water.

How often, with the *bora* (north wind) blowing, has Giacomo reminded me of the risk of taking the gondola into the Sacco della Misericordia, that northern inlet, suitably facing the cemetery, along one side of which runs the garden of the Palazzo Contarini dal Zaffo, the most enchanted spot in Venice. Do I not remember how Signora D. was so nearly wrecked, attempting the transit on a stormy night? It is, he says, a *punto scabbroso*, though no one would guess this on a calm day—the kind of day on which Guardi has often painted it, looking across to the cemetery with the island of Murano on the left, the colour of a dried rose-leaf.

The *siroccale*, too, nearly always brings a high tide: and at high tide there are certain bridges under which a gondola cannot pass. The Carmine bridge, built low, it is said, to spare the footsteps of an infirm Cardinal, is a notorious offender. This bridge was also a focal point for the traditional fights between the Castellani and the Nicolotti—factions drawn from rival districts in Venice. Inlaid at each of the four corners of the bridge's shallow crown is a marble footprint, showing that there the champions of each faction took their stand ready to throw their adversaries into the water.

The Carmine bridge barred my way into the town, for I lived just round the corner, opposite the church of San Sebastiano where Paolo Veronese is buried; and often have I had to wait while the shining *ferro* of the gondola—the Doge's cap conventionalized in steel—plunged up and down like the head of a restive horse, but always too high for the flat arch of the bridge: and disengaged spectators, who are never lacking in Venice, would offer to lend their weight as ballast to our too buoyant craft, so that it passed under, to the accompaniment of much advice and many grunts. Little as I want to see Venice changed, I have often wished that the Ponte del Carmine could be rebuilt to a more aspiring model.

There are other drawbacks to the gondola. Byron called it "a coffin clapped in a canoe"; but the coffin part, the *felze*, the sombre cabin lined with silk and crowned with a row of



Stanford, London

funereal pom-poms, is a luxury from more spacious days which few gondoliers now possess and still fewer are willing to put on, so heavy is it, so grievously liable to be stained, scratched or otherwise blemished. If the weather is bad enough to need the felze, it is too bad to use the felze: that is the argument. And lastly, Venice is not so completely water-borne as strangers might think, or as it was before the Austrians filled in so many of the canals. You cannot always drive up to the door, you may have to get out in the wet, and walk.

Except for long journeys—and the longest single journey through the city takes but half an hour—I did not use the gondola much in Venice. I liked to walk, though the air in the *Calli* is stagnant, the pavement monotonous and dead under one's feet, and one sometimes comes back feeling more tired than exercised. But tired only in body. To the eye and the mind the streets of Venice are a perpetual refreshment. Ruskin was right to call his book *The Stones of Venice*. In some moods, though not in all (for the Venetian climate conduces to nervous irritability and a critical outlook), every stone seems to have been laid with love. And not only in places where the builders'

handiwork may have been supposed to catch the eye, but in half-hidden spots where you have to peer and crane your neck to see it. To palace and hovel alike the Venetian builders gave of their best, achieving an effect of harmony out of the most incongruous jumble of styles and sizes. There is no residential quarter in Venice. A palace may spring out of a slum, may indeed be a slum, a tenement inhabited by many families. To be sure, the fringe of great palaces along both sides of the Grand Canal forms a kind of aristocracy of buildings, but even these are interspersed with humbler dwellings; and conversely many of the finest palaces—the Giovannelli, the Albrizzi, the Mocenigo palace of S. Stae—were tucked away in side streets, and hemmed in by houses of no account which prevent their enormous proportions being properly realized.

Venice is a city built for show; the Italians are intensely sensitive to appearances, and nearly every house, however simple, has some artistic merit; but it is a democratic show in which the magnificence is shared alike by the poor and the rich; indeed the very word '*palazzo*', with its presumptuous ring, is a late innovation; and such Venetian patricians as still inhabit the homes their forebears built,

invite you formally to *cà loro*—"their house", not their palace.

In many, perhaps in most, great cities the houses of the rich seem to look down on their poorer neighbours as a Rolls-Royce looks down on a Baby Austin: to see them is to think of them in terms of money. Venice must have cost more to build than any city of its size in the world: yet that aspect of it need never strike the beholder unless he is looking for it. A few of the Renaissance palaces—the Rezzonico, the Papadopoli, the Cà Pesaro, the Vendramin Calergi, with their audacious fronts, proclaim in voices which can still be heard, the pride and power of the families that built them; but even in their case grandeur survives ostentation. Oddly enough on the walls of the Vendramin, one of the least beautiful but not the least sumptuous of the four, whether in humility or to propitiate Fate, we find written the words *Non nobis domine*—"not unto us, O Lord, but unto Thy name be the praise"—a sentiment hard to connect with the edifice it adorns, but true of most of the stones of Venice.

John Peck

But architecture is not the only charm of the streets. All quarters in Venice are poor quarters, but some are poorer than others. I lived in a very poor quarter, and my nearest way to the Piazza lay along a street rightly called the Calle Lunga, for it seemed interminable. There is a tradition that in the Middle Ages the people of the neighbouring parish, Archangelo Raffaele, were so provincial that they had never been to the Piazza and did not know the way. (Actually it is some twenty-five minutes' walk.) One of them, greatly daring, entrusted himself to a guide but took the precaution to drop a fish (most of the inhabitants were fishermen) at frequent intervals along the route to mark the way back. An ingenious plan, but alas it came to naught, for the cats ate the fish and tradition does not record whether the traveller ever reached home. The same fate would await him today: like all the streets of Venice, the Calle Lunga swarms with cats—thin, furtive creatures belonging to a breed supposedly imported for its ferocity and rat-catching qualities. They nose about among the parcels



of food humane persons have put down for them and flee at one's approach. They add to the movement, if not to the gaiety, imprisoned between those narrow walls. Above, the washing flaps, cheerfully or despondently, according to one's mood, making a restless pattern of shade and sunshine.

In Venice the life of the houses overflows into the streets; the people buy and sell, talk, eat and sometimes sleep there, and they also walk, but not fast, and if you are in a hurry you must shoulder your way and shout "*Con permesso!*" ("by your leave"). As a rule, the Venetians show in their faces and bearing everything they feel: the happy look happy and sing an operatic stave; the sorrowful look utterly woebegone; the strong stride along as though on air; the infirm creep painfully in the shadow of the wall, where the human current is weakest; the prosperous expand with consciousness of wealth; the poor shrink into themselves. They are a most self-expressive people. Only when there is bad news do they walk about with hard, shut faces—*con muso duro*—keeping their feelings to themselves.

The Venetian temper is *allegro*, but the Venetian tempo goes *adagio*. I never seemed to find time to loiter in the streets, because the routine into which I had insensibly fallen meant spending the best part of the day on the lagoon. A friend said, "You use Venice as a place to work up a sweat in", and he was partly right; incidentally the climate of Venice is irresistibly sudorific, especially when the weather is under the influence of the sirocco, a condition which does not depend entirely on the direction of the wind.

The lagoons of Venice reach down to Chioggia in the south, a distance of nineteen miles. I helped to row the gondola there once, against the tide most of the way, past the Lido, past Pellestrina, past San Pietro in Volta, the long shingly islands which divide the lagoon from the Adriatic. Alberoni, some seven miles out, was the chief gateway into Venice before the channel round the north end of the Lido was developed. When Chioggia was in the hands of the Genoese, the Venetians, hoping their enemies would go aground on the *barena*, the mud flats, removed

John Peck

(Opposite) The Dog-

ana guards the entrance to the Grand Canal. The gold ball at the top is crowned by the figure of Fortune, which turns with the wind. Behind rise the domes of Santa Maria della Salute, Longhena's masterpiece, a votive offering to commemorate the deliverance of Venice from the plague.

(Right) These inter-laced porphyry warriors are affixed to a corner of St Mark's. Many stories are told about them. One is that they were brought to Venice from Acre, and represent Greek Emperors who shared the throne of the East early in the 11th century. But they look more like the Crusaders they are sometimes said to be





Paul Popper

Top) A view of the façade of St Mark's and the Ducal Palace, with the Piazzetta on the right. Beyond the column bearing the Winged Lion of St Mark is the island of San Giorgio Maggiore. The four golden bronze horses above the Great Doorway were spoils from Constantinople. (Left) This lovely well-head stands in the Campo SS. Giovanni e Paolo and close to the famous equestrian statue of Bartolomeo Colleoni. Formerly Venice dined for water on these wells



(Top) The Bridge of Sighs was made famous by Byron, but its sinister associations have been disputed or belittled. It connects the Ducal Palace with the prison, across the roofs of which Casanova made his famous escape. (Right) It has been said that in Venice there are roughly as many bridges as gondoliers—that is to say, between four and five hundred. Here is a characteristic bridge. Formerly the bridges had no parapets, and one or two of these perilous structures still exist





(Left) This dramatic photograph, taken from the Gallery of St Mark's, shows the oldest side of the Piazza, the pigeons beloved by tourists and photographers, and the two cafés, Lavena's and the Quadri, which were patronised by the Austrians, and avoided by the Italians, in the time of the Austrian occupation. (Opposite) A view of the Grand Canal taken from the Accademia Bridge. On the left is the Gothic Palazzo 'Cavallo' with the Palazzo Barbaro next to it. The gondola posts (briccole) stand out boldly and beyond them are the domes of the Salute

Toni Muir

the posts that marked the canal. The lagoon is threaded by these natural channels, some of them visible at low tide, forlorn brown rivulets running between wide tracts of mud; but in normal conditions they cannot be distinguished from the water round them, except, on a calm day, as streaks of darker blue. The lesser known canals are called *ghebi*, and their whereabouts has to be learnt. The course of the more important ones is marked by posts—*briccole*—set at regular intervals, sometimes singly, sometimes in clusters like bunches of asparagus. On a still day when the horizon is hazy these posts seem to climb into the sky before they curve away out of sight.

I came to know most of the canals within a radius of five miles of Venice; on the south side that is, the north I knew much less well, though I went to the islands of Torcello and San Francesco del Deserto—the one bone-pale and monumental, the other green and sylvan,

I lived on the south side of the town and the north always seemed strange to me, and a little sad. What a contrast between that cheerful bustling thoroughfare, the Zattere, a noisy symphony in a major key, and the corresponding promenade on the north, the Fondamente Nuove, a nocturne by Chopin, always in shadow and with few people on it except a



7. 10. 1900

little throng round the steamer-station, waiting to go to Murano or visit their dead relations in the cemetery. I used to go that way sometimes, however, skirting the great indented wall of the Arsenal, its pink surface blotchy with white salt sweat, and tie up at a post by the island of Santa Rosa, near its minute white church guarded by two cypresses—*il duomo* the cathedral, my gondolier called it: I always knew the moment when this joke would come.

In spring the voluptuous nightingales shouted from the thickets all through the heat of the day. After lunch we played a Venetian card game called *briscola*, a simple digestive

game less exacting than the intellectual, memory-straining *tre-sette*, or the fascinating but maddening *Gi-la-Greca*, a kind of poker—the point of which was to lose your temper and show it, otherwise the game lost its savour. Like poker it “belonged to the bluffed”, and I could generally win: but so ignobly, that all the zest went out of it. Then, after a siesta, I turned to my book and he to his newspaper—that newspaper which, with others of its kidney, has made so much bad blood between our countries.

In the late afternoon we rowed back, straight into the sun, past the church of the Greci with its white, leaning tower, out into

the populous dancing water of the *bacino* (basin), the piazza of Venetian maritime life, past the Dogana, whose clock grew more and more unreliable under the strain of the political situation, up the crescent-shaped Giudecca canal, past the red, many-windowed Casa del Vento where a breeze always blows, and home.

My seasons in Venice were the spring, April, May and June, and the autumn, October and November; they embraced every kind of weather and I have seen the lagoon in most of its moods. Twice I have been ignominiously towed home by a tug; once I was nearly benighted at the island of Sant' Angelo della Polvere, a powder magazine of forbidding aspect. In those days our relations with Italy were friendly and the commandant, by the light of his single candle, telephoned to Venice for a motor boat. We sat watching the crests of foam racing across the dark waters, and thinking that every moving light was the answer to our summons, but the motor boat never came, and he sent me back in the garrison's boat, manned by a dozen sailors.

None of the islands, however beautiful to look at, was very hospitable. San Servolo was the men's lunatic asylum, San Clemente the women's; Sacco Sessola, which would have been such a useful port in a storm, only admitted consumptives and their friends. The Isola della Grazia held itself aloof from all but cases of fever; Poveglia, with its lovely campanile, one of my favourite haunts, was reserved for those who had come in contact with such cases. The islands that one could land on—Campana, Poveglia Vecchia, Fisolto—forts in the last war, clad in verdure but little else, were places no one could want to land on: partly for that reason I used to frequent the nearest, until superstition, born of a number of unexpected thunderstorms which seemed directed at me personally, made me forgo it. And with increasing political tension, the fortified islands like Campalto grew so sensitive to my proximity that angry shouts greeted my appearance on the skyline.

Yes, the islands were forbidden country, emblems of what all Italy afterwards became. They looked friendly and were not. But the lagoon was always friendly, as were the fishermen who rowed across it, or sailed down the canals in barges or, more grandly, in *bragozze*—big and rather clumsy Adriatic fishing boats—with saffron and russet sails, sometimes dyed with the emblem of the family who owned them; it might be a conventional design, or a religious subject, or a horse ("*Che cavallo!*") my gondolier used to exclaim, pity-

ingly, at the sight of this naïve but spirited quadruped).

The boatloads of young people who came out on the afternoons of festas, dressed in white, laughing at their failure to manoeuvre their little boats, laughing at each other, laughing at nothing, always enjoying themselves, never rowdy or vulgar or inane, were friendly too. And in the distance lay Venice under the guardianship of its cupolas and campaniles, higher than the water, lower than the sky, resting, if it was a calm day, on its own reflections.

As a rule, the most beautiful view of Venice is the one you have coming back from the Lido when twilight gathering round the setting sun turns the air to violet. But the one I know best, the one which Shelley must have seen when he first approached the city, is from the mainland, from Fusina. There is a moment, which must be watched for and which does not last long, when the declining sun catches the brickwork and turns it to gold; a few minutes later the lagoon changes from dark blue to pale blue, with lilac shadows between the ripples. Sometimes the whole expanse becomes a smoky pink.

At a distance, Venice is dominated by the campanile of St Mark's, but coming nearer, other towers assert themselves; Madonna dell' Orto, solid and round-topped, rules over one quarter on the north side, San Francesco della Vigna, slender as a pencil, soars over another. The Frari leans this way, San Stefano that; churches are always cropping up in positions which do not seem to belong to them—at a distance, the dome of the Salute can easily be confused with that of the Redentore—and I had lively arguments with my gondolier as to which was which. Our church, San Sebastiano, had a modest but satisfying campanile of red brick, much older than the church itself, with an octagonal upper storey where the bells hung. Like all Venetian bells, they were very vocal at sunset.

Back from the lagoon I stood on my balcony to watch the stream of people passing through the little triangular campo across the canal and directly in front of me. Above them, crowning the marble façade of the church, are the figures of three saints, in the centre San Sebastian, pierced with arrows. I thought that his attitude, which though operatic suggests more physical pain than do most representations of the twice-martyred saint, had no message now for the happy, kindly, easy-going throng who chattered their way beneath him. But during the five years that have passed since I saw him, he has become a symbol of mankind.



Roofs

Toni Muir

Seen from above: the haphazard congregation of roofs round the 12th-century church at Moustiers Ste Marie in Provence



Val Doone

Tiles: old, mellow, hand-made, on the Bishop's Palace at Farnham, Surrey—



Bill Brandt



Dorien Leigh

—mass produced, in a London suburb: in light and shade on a villa roof



Paul Popper

Spires and pinnacles: at Mont St Michel, France—



W. B. McQuitty

—and at Bangkok, on a Siamese temple



Toni Murr

Battlements and towering blocks: in the High Atlas Mountains of Morocco—



Black Star

—and in the City of New York



Dorien Leigh

Seen from above: composite design of roof and courtyard
at the Mosque of Ulucami, Adana, Turkey

Alaska

by D. L. SANCRANT

The author first visited Alaska as an officer of the American Merchant Marine in 1929, and was again on active service with the Armed Forces, at Ketchikan, when the Japanese invaded the Aleutians in 1942. In the interval, spent almost entirely in Alaska, he undertook much journalistic and research work which enables him to write intimately of this country which has become his home

WHEN the Japanese dumped a few tons of bombs on Dutch Harbour and a few soldiers on Kiska, Attu and Aggat in the Aleutian Islands, the attention of the people of the United States was drawn sharply towards Alaska.

I was in Ketchikan at that time, near the southernmost tip of what we know as south-eastern Alaska, roughly 650 miles north-west of Seattle. The enemy landed about two thousand miles west of Ketchikan. We held practice blackouts and that sort of thing, for it was some time before the situation cleared enough to permit any estimate of the scope of the enemy's invasion of Alaska. After it had cleared, I believe Alaskans generally were less concerned over the Japanese occupation of three remote, little known islands than were the people of the United States, particularly in the big west coast cities. Perhaps it was because we understood more clearly that the far Aleutians are a long way from the rest of Alaska, particularly when the difficulties of operation and movement are taken into account.

While the area of Alaska is only about five times as great as that of the United Kingdom, its shape adds enormously to the distances between its extremities. Its southern base line, from Hyder on the British Columbia border to Attu, at the tip of the Aleutians, is roughly 2300 miles; from Dixon Entrance in the south-east to Point Barrow in the Arctic, 1400 miles; and from Point Barrow to Attu, about 2000 miles. In many parts of the world these would not be great distances to travel. In Alaska they are, except by air.

The Territory consists of several vastly different regions. Mr Frank Dufresne, Executive Officer of the Alaska Game Commission, divides it into four: the Pacific Mountain Region draining into the Gulf of Alaska as far west as Cook Inlet; the Aleutian Region, which includes the Islands proper and the Alaska Peninsula to Iliamna Lake; the Central Plateau, which includes everything north of the first two to the Brooks Range of mountains in the Arctic; and the Arctic Slope, which drains northward into the Arctic Ocean.

The Pacific Mountain Region is by far the most important, economically, both to Alaska and the United States, for it is the most heavily populated, contains a large proportion of Alaska's resources in raw materials and its scenery is some of the most beautiful and spectacular on earth. The climate, controlled by proximity to the coast, is more clement than would normally be expected in a region so far north.

South-eastern Alaska is made up of the Alexander Archipelago and a narrow strip of mainland, is uniformly mountainous, heavily timbered on the lower slopes and badly segmented and chopped up by tidal channels, inlets and bays. Inter-city travel is by boat or plane. The topography is such as to make highway construction impractical or impossible. Except for town sites and Indian Reservations, all of south-eastern Alaska is included within the boundaries of the Tongass National Forest from which vast quantities of the Sitka spruce lumber have been taken for use in the construction of Britain's famous 'Mosquito' bombers.

Before the war, Ketchikan and Juneau, both in south-eastern Alaska, were considered the two largest cities in the Territory. Each had a population of about five thousand, including Alaska Indians. Juneau, the territorial capital, lives by a combination of Governmental pay-rolls and the pay-roll of the famous Alaska-Juneau Mine, while Ketchikan is the principal centre of a fishing industry. Sitka, the old Russian capital, Craig, Wrangell and Petersburg are all fishing villages, while Skagway at the head of Lynn Canal is the terminal village of the White Pass and Yukon Railway, which winds through the mountains from tidewater to the old mining town of Whitehorse, in the Yukon Territory. Skagway, more remote from the ocean than the other settlements, has a relatively cold winter and a warmer summer than the others.

Throughout the remainder of south-eastern Alaska, people live and dress very much as do thousands of villagers in the continental United States, seemingly caring little that



Dorien Leigh

(Above) Part of Rudyerd Bay, Behm Canal, in the Tongass National Forest area, whence comes the Sitka spruce, used in the construction of Britain's 'Mosquito' bombers. (Opposite, top) A view of Mendenhall Glacier—over a mile wide, and a point of attraction to many visitors from the neighbouring town of Juneau; (bottom) Juneau, capital of Alaska, and official seat of the Governor. The people are mostly employed in the famous Alaska-Juneau gold-mines

their settlements are surrounded, and separated, by unbroken wilderness. In general we, in Alaska, live well and comfortably, despite heavy, at times incessant, rainfall. The principal towns all have their cinemas and schools, clubs and churches, hotels and pubs. By and large, there is less discomfort and a more care-free existence than is enjoyed by most people.

While Sitka and Wrangell date back to the Russian Occupation, the other settlements of south-eastern Alaska are young. In a heavily timbered country they have been built of wood, largely on piling along the waterfront. Growth has often been spontaneous, without much planning, and the waterfronts present a somewhat ramshackle appearance.

Fishing is the principal industry of south-eastern Alaska, and the most valuable of the entire Territory. Salmon and halibut account

for the greater proportion of the catch, which exceeds \$50 million annually in value, for although the waters of Alaska are rich in other forms of sea foods, they are only slightly developed, or are not being fished at all. Future development in this industry might easily bring the total value of our fisheries to several hundred millions of dollars annually.

At the head of the Gulf of Alaska, the St Elias and Chugach ranges of mountains rise sharply from the sea, affording little foothold along their shores for human life or development, even on a small scale. Here, at the head of the Gulf, the mountains form a wall up which climb the moist winds from the ocean in an eternal procession, to drop their moisture on the upper slopes as snow, piling endlessly winter and summer, upon the upper slopes of the vast glaciers that creep down the mountains to the sea.



Denise L. L. L.





(Left) Alaska brown bears, killed in Tongass National Forest. (Below) Navigation north of Bering Straits does not open until mid-July. Operations are then carried on among the ice-floes until about the 1st of August when coastal waters are generally clear of ice. A trading ship on the move from one anchorage to another here tows its attendant barge and small boats carefully through the floes, which are white and mushy on top, but blue and granite hard below the waterline. Some of the floes are acres in extent and many feet thick

Donor 1911

D. L. Sancrant



This wall of mountains across the head of the Gulf of Alaska is reputed to be one of the greatest and most heavily glaciated areas in the world. On a clear day the great peaks, rising slope upon slope from the edge of the sea, 15,000 or 19,000 feet, draped with vast ribbons of creeping ice, present an unforgettable sight.

It was on this terrible no-man's-land of a coast that Vitus Bering, a Dane in the service of the Russian Crown, first planted the flag of his Tsar, then, after a brief survey, turned back toward Russian Asia, disheartened at what he had found. Had he made his land-fall 300 miles on either side, it would have put him on a green, beautiful and hospitable coast.

Moving westward along this coast, Cordova, near the mouth of the Copper River, might be said to be the beginning of civilization in south-western Alaska. Originally Cordova was the terminal city of the Copper River and North-western Railroad which was built up the rugged valley of the river to the great Kennicott copper deposits. The copper mines have long since been closed and the railway, abandoned, has fallen into disrepair.

When the Kennicott mines were closed, Cordova was expected to die a natural death and become another ghost town on the map of Alaska. Instead of abandoning their city, however, the people of Cordova turned from the mountains to the sea for their livelihood.

Salmon canneries furnished considerable income, and to add to it the people exploited the rich beds of razor clams on the flats at the mouth of the river. Now the city ships many thousand cases of clams to the markets of the United States each year. The sea abundantly rewarded the people who preferred to stay and make the most of what was at hand rather than leave their homes because local employment was no longer to be had.

Although Cordova has a colder winter than south-eastern Alaska, it is not nearly so severe as might be expected so far north, particularly when it is remembered that the city lies almost under the shadow of enormous glaciers. The sea tempers the climate and Cordova enjoys cool summers, and winters that are relatively much less cold than those of southern Canada and the northern part of the United States.

West and north from Cordova, at the head of Prince William Sound, the village of Valdez sits forlornly at the foot of one of the most desolate talus slopes imaginable. From Valdez, the Richardson Highway crawls away into the mountains, through Keystone Canyon, over the Alaska Range of mountains to the Interior, and eventually, to Fairbanks, on the Tanana River, hundreds of miles to the north. Originally the route was opened as the Richardson Trail, and over it many thousands of people poured into the interior of Alaska during the gold-rush years, travel-



ling on foot or horseback. Traffic and time have brought about the evolution of the old trail to its present exalted status of an improved motor road, over which a substantial volume of freight and passenger traffic moves each summer. During the winter it is closed by snow in the mountains.

About 150 miles west of Cordova and Valdez the little city of Seward sits on Resurrection Bay, at the salt-water terminal of the Alaska Railroad which winds on up the Kenai Peninsula to Anchorage, thence through Rainy Pass in the Alaska Range, to end at Fairbanks.

Seward has always been a railroad town, as Valdez has always been a highway terminal. Since the beginning of the war, engineers have driven a new tunnel under Whittier Glacier, far up Kenai Peninsula, and a new terminal city is building beside Portage Bay, on Prince William Sound. As a result Seward now is in the same position as that occupied by Cordova when the Kennicott mines were closed and their railway ceased operations: it must find other sources of revenue or cease to exist as a city.

Up the railroad from Seward, at the head of Cook Inlet, the city of Anchorage has become the principal settlement of the rail belt. Unlike most Alaskan communities it has drawn wealth from several sources; the nearby Matanuska coal-fields, a substantial fur trade, and mining. Its salmon canneries participate in the annual fish pack and recent agricultural development of the Matanuska valley has given the city the best rounded economy of any in the Territory.

Anchorage lies between the mild weather of the coastal areas and the deadly severe weather of the Interior. The summers are warmer than in the coastal areas, with more sunshine and less rain, and the winter is one of snows, temperatures to 40 degrees below zero, fur clothing, dog sleds, planes on skis, snow-shoes and snow-ploughs.

The Anchorage district is one of sharp contrasts. Tides in Cook Inlet are exceeded in range only by those of the Bay of Fundy: they ebb off smoothly, but the flow comes as a foaming crest, racing across the flats.

From the edge of the sea at the head of Cook Inlet, the slopes of Mt Denali, now called Mt McKinley, rise steadily. McKinley, at 20,200 feet, is the highest peak on the North American continent. From the summit the peak breaks away very sharply to the north-west, for a drop of about 18,000 feet in a few miles, to the upper flats of the Kuskokwim valley.

A few miles south-west of the main peak of Denali, Mt Foraker rises to 17,000 feet. Along a ridge between the two are several

lesser peaks. This group was solidly rooted in the lore of the early Indian tribes of the region. Denali was their god, Mt Foraker was the wife of Denali and the lesser peaks their children. Early explorers of the district ignored Indian names and beliefs and christened the two great peaks McKinley and Foraker. Attempts are now being made to restore the original Indian names to the mountain family.

The heavy glaciation along the Gulf of Alaska ends on Kenai Peninsula. A few patches occur farther west but nothing compared to the enormous deposits along the coast from Kenai to south-eastern Alaska.

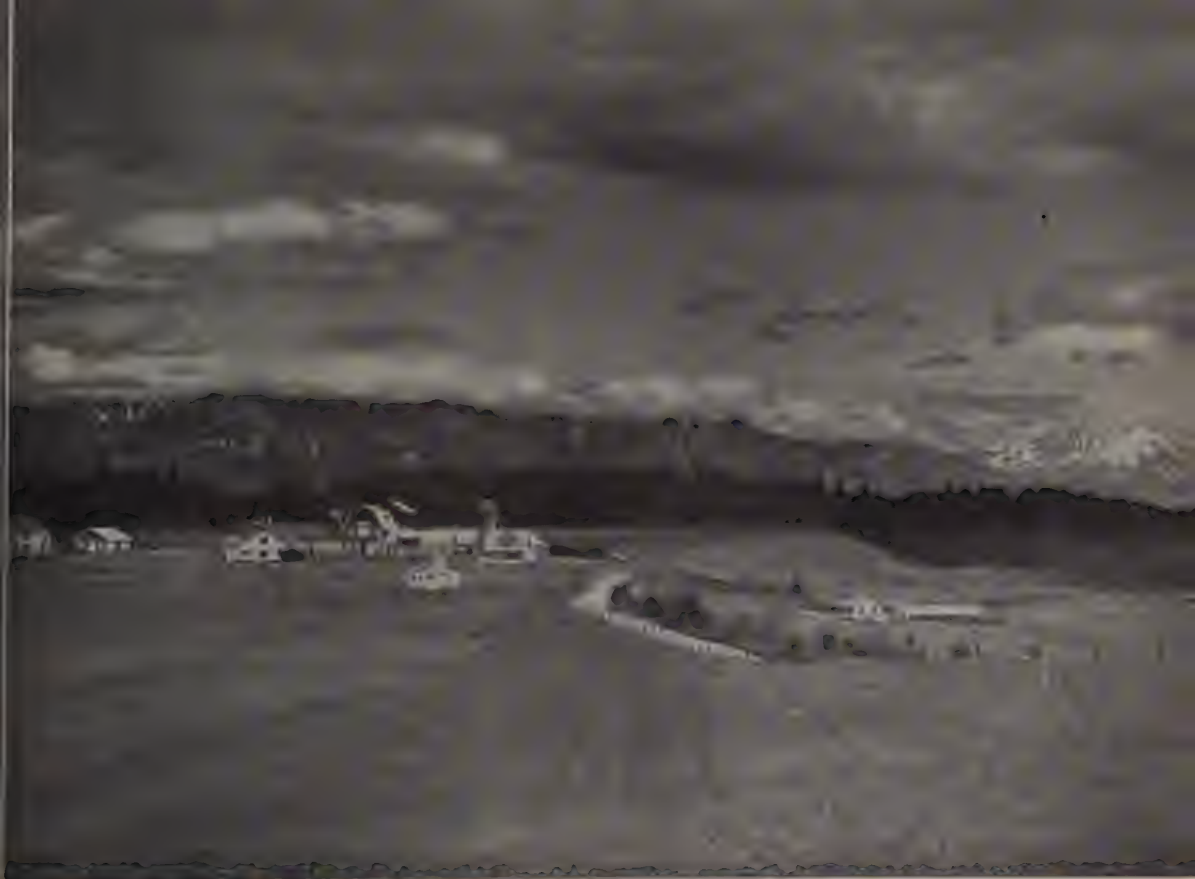
South of Kenai Peninsula the islands of Afognak and Kodiak sit as a continuation of the mountain range of which Kenai is a part. They are properly a part of the Pacific Mountain Region rather than of the Aleutian Region from which they are separated by Shelikof Strait. The first white settlement in Alaska was made at Three Saints Bay, Kodiak Island, by the Russians in 1784. The islands enjoy a combination of excellent commercial fishing, with a large annual pack of both salmon and herring. Before the war the principal settlement was the little fishing village of Kodiak.

These islands are the home of the great Kodiak bear, largest of the world's carnivore and one of the most dangerous when disturbed or wounded. The climate is relatively mild, much of the soil is fertile and of recent years the extensive and excellent rangelands have received considerable attention, along with the west coast of Kenai Peninsula, from people intent upon establishing homes in Alaska.

Mt Katmai National Monument and the famous Valley of Ten Thousand Smokes lie directly across Shelikof Strait from Kodiak Island and about sixty miles away. In 1912 Mt Katmai exploded. Some two cubic miles of rock were pulverized and spewed into the sky, settling heavily for hundreds of miles. The finer dust was reported to have settled completely around the earth.

As the dust from Mt Katmai settled over them, the future of Kodiak and Afognak Islands hung in the balance for some time, when all life and vegetation was in imminent danger of extinction. Kodiak villagers were taken to sea aboard a coastguard cutter. Later, when it became apparent that Kodiak Island had not been reduced to a wasteland, they were returned to their homes. The thick layer of volcanic ash now produces lush growths of grasses that make excellent forage for live-stock.

Years later, after the immediate vicinity of



Matanuska Valley

(Above) The Matanuska Valley.

(Right) Mount

McKinley, the highest

peak on the North

American continent.

In the foreground is a

food store or cache

placed on piles out of

reach of marauding

animals



Mt Katmai had cooled, the Valley of Ten Thousand Smokes was discovered. Through the years the valley has continued to cool off and, at last reports, the ten thousand smokes had dwindled to about half a dozen.

The Aleutian Region, including the Alaska Peninsula, from Cook Inlet to Attu Island, is the longest continuous and continuously active volcanic region in the world.

Before the war, population of the entire Aleutian Region was slightly over a thousand, mostly Aleuts. When the Japanese invaded the region, the majority of these native people were evacuated to south-eastern Alaska. Such population as there now is in the Aleutians is almost entirely military.

The great Central Plateau Region, or the Interior as it is generally called, is the Alaska popular with novelists. It consists of gently rolling upland country, drained by the Kuskokwim, Tanana and Yukon Rivers. It lies between the Alaska Range and the Brooks Range; extends eastward into Yukon Territory and slopes gently westward to the shores of Bering Sea. It is a land of light rainfall, perpetual daylight in midsummer and little in mid-winter, has an annual temperature range of about 170 degrees, from 100 above zero on a warm summer day to 70 below on a cold winter day.

Despite the light rainfall, this is an area of very heavy erosion, due largely to freezing and thawing. What mountains once covered the Plateau have long since eroded away, and the minerals have washed down and formed natural concentrates in the beds of the streams. While gold deposits are found throughout the Territory, it was natural, easily accessible, concentrations of gold in the Yukon Valley, which caused the gold rushes at the turn of the century. There is still gold, as well as other minerals, in Alaska, but mining has become a well-run and orderly industry: the days of gold rushes are over.

The only city of any size in the Interior of Alaska is Fairbanks. Originally a gold-rush boom town, it is now a well-established centre serving the entire Plateau Region. Its principal activity is the movement of traffic over the Alaska Railroad, the Richardson Highway, the Steese Highway which runs north-east to Circle City, aeroplane services to all parts of Alaska and through Juneau to the United States, and river traffic to and from boats plying the rivers during the open season of navigation. The town is also northern terminal of the Alcan Highway, which runs down through Canada to Dawson Creek, and thence by rail to all parts of the United States and Canada. It is at present used for military purposes only.

The people of Fairbanks and the Interior

settlements enjoy none of the climatic advantages of the Gulf of Alaska and the Aleutians. Their winters are bitterly cold, the temperature dropping sometimes to 50, 60 or 70 degrees below zero.

During the winter months the Central Plateau, in common with the Arctic Slope to the north, is a dead, frozen waste. Fur clothing is worn of necessity rather than for show; dog-teams and sleds are used instead of automobiles, and the rivers, feet thick with ice, become the principal highways of the winter even as they are the principal arteries of commerce during the summer.

In contrast to the cool, moist, rainy summers of the coast, those of the Interior are warm, often hot, and during midsummer Fairbanks enjoys continual daylight. But men and beasts are plagued by mosquitoes and gnats from the time the surface of the earth thaws in the spring until it freezes in the autumn, and a head net, on a broad-brimmed hat, with a draw-string at the throat, is a standard article of apparel.

Alaskans, white and brown alike, travel readily by air, but the dog team, which has always been a traditional mode of winter travel, is still widely used, particularly among the Indians of the Interior and the Eskimo tribes of the Bering Sea and Arctic coasts. The modern Indian or Eskimo village would seem deserted without its dogs; there are at least as many of them as there are humans in the village.

No article on Alaska could be complete without mention of Nome. To much of the civilized world Alaska is Nome—the mushroom city that sprang up on the golden beaches of Seward Peninsula some forty years ago still sits beside the sea, and there is still gold in the sands of the beach. The old town had dwindled until only about a thousand people remained, when, in the autumn of 1934, fire broke out in the Golden Gate Hotel—a hostelry well remembered by many Britons. By night only a fringe of buildings remained around the edges of the town. Most of Nome, its wooden streets and even the tundra upon which the buildings stood caught fire and burned down to the ice, for Nome stands on perpetually frozen earth. The gold-rush city was destroyed, and with it most of the relics of the hectic years when a man might take a thousand dollars from the sands of the beach in a day and spend it the same evening.

When I visited Nome in 1935 a new and perhaps better town was growing out of the charred remains. Population had dropped to about 800, Eskimos included, but no great change had taken place in the tempo of life. The Eskimos still sauntered on their un-



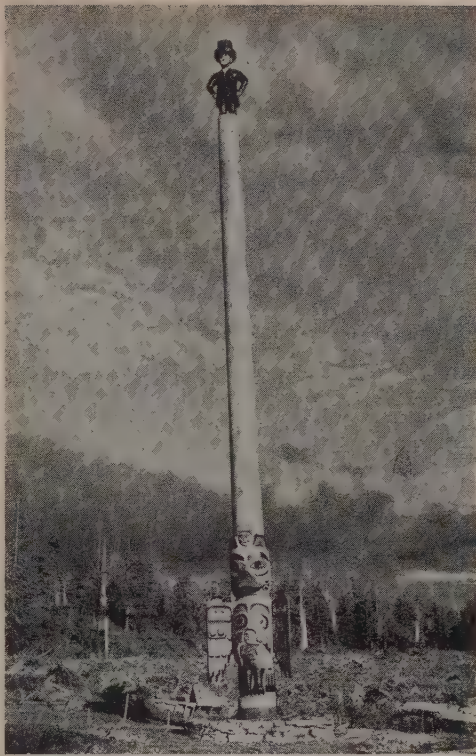
D. L. Sancerant

troubled ways while the white traders and civil servants and their families bustled about much as they had always done. Gold remains the life-blood of the place, and gold-mining still goes on, though curtailed by the war. During the summer boats and planes come and go, and each arrival and departure is an event. In the winter it is planes and dogsleds, and departures and arrivals remain just as important. From November to June the upper part of Bering Sea is sealed with ice and no ships can reach the little mining town.

Least known of Alaska's regions is the Arctic Slope, north of Brooks Range, reported to be largely barren. The 700 miles of coast from Point Hope to Demarcation Point on the Canadian boundary had a population of 1117 in 1940, Eskimos except for a few white traders and civil servants. The interior is uninhabited.

The Arctic ice-pack lies against the land for the greater part of the year, making navigation impossible. Usually the pack moves offshore during August, permitting ships to reach Point Barrow and the Beaufort Sea to the eastward from Barrow. They may spend from two to three weeks in the Beaufort Sea, then they must be back around Point Barrow and south lest they be caught by the ice-pack and crushed or driven for shelter into one of the few sheltered harbours, to freeze in for the winter and until the next short season of navigation.

This route, up along the coast from Point Hope to Point Barrow, was followed by many of the early British, Norwegian and American whalers on their way into the Beaufort Sea for sperm whale. Admiralty Bay, just east of Point Barrow, was one of their favourite winter rendezvous and many of the dramas of the whaling fleet were staged here and along the nearby coasts. Tall whalers were caught in the ice and crushed and the crews perished. No adequate history of this part of the old whaling industry has ever been written, and it is not likely that it will be. Too much material has been lost or destroyed, and what remains is contradictory and worthless.



Dorian Leigh

Indian burial customs vary with the locality in Alaska. In the Arctic the dead are simply laid out on the frozen tundra; on some of the Bering Sea Islands they are laid on flat rocks beside the sea; in the Aleutians they were placed in caves, and in south-eastern Alaska they are buried in the earth, and shelters built over the graves to keep off the rain. (Left) A Thlinket Indian grave house in south-eastern Alaska. The painting is a 'totem' to keep away the evil spirits. (Above) A 19th-century totem pole of Abraham Lincoln in the Saxman Islands, erected in 1940

Alaska, then, is a vast, only slightly touched wilderness. Most of it is virgin, much of it seldom visited by men.

As a result of the war, there are now high-ways where none was before and landing strips and air-fields. Many of the men are away with the armed forces; some people have been moved from their homes to areas of greater safety; some mines are closed; some commodities are scarce or not available. The wilderness is as it has always been—immense, ruthless and cold. The mountains brood on against the skies, serenely aloof from the little affairs of men.

The Scientists' Warning

by E. G. R. TAYLOR, D.Sc.

Modern thinkers declare that it is no longer optional but absolutely necessary that science and the new powers it gives us should be universally understood, appreciated and effectively used. Professor Taylor, whose forcefulness in the exposition of modern problems is already well known to our readers, makes the recent publication of a symposium on the subject the occasion for defining and emphasizing this vital necessity

How godlike and serene is the demeanour of the babe seated in his mother's arms! All through life his deepest longing will be to recover that which he possessed for so brief a time: a world that was perfect, because it was unchanging and secure. With what fervour do we sing the words of a favourite hymn:

Change and decay in all around I see,
O Thou Who changest not, Abide with me!

Photograph from W. F. Mansell



This is the unconscious cry of all humanity, for, as another poet has told us, "in a ceaselessly changing world, Man seeks a changeless pole". Yet in the very nature of things he cannot find it.

It is because the accelerating tempo of change has mounted in our own day to an almost unbearable pitch that whole nations have fallen a prey to fear and anger. Fear, bred of a sense of insecurity, prompted the acceptance of the Leader, who, in return for blind obedience, promised to take all burdens upon his own shoulders. Anger, born of fear, provoked acts of brutality and aggression which plunged the world into war. Yet myriads believe that once the war is over we shall "go back to normal". Myriads still hope to retreat into a mother's arms.

Now paradoxical as it may sound, it is we ourselves rather than the external world who are changing and consequently have brought about change. Mankind has, "after long travail, acquired new powers, new instruments of understanding, a finer sensibility", says Herbert Read in a deeply thoughtful essay, which introduces a score or so of writers in a stimulating and exciting book published this year: *This Changing World* (edited by

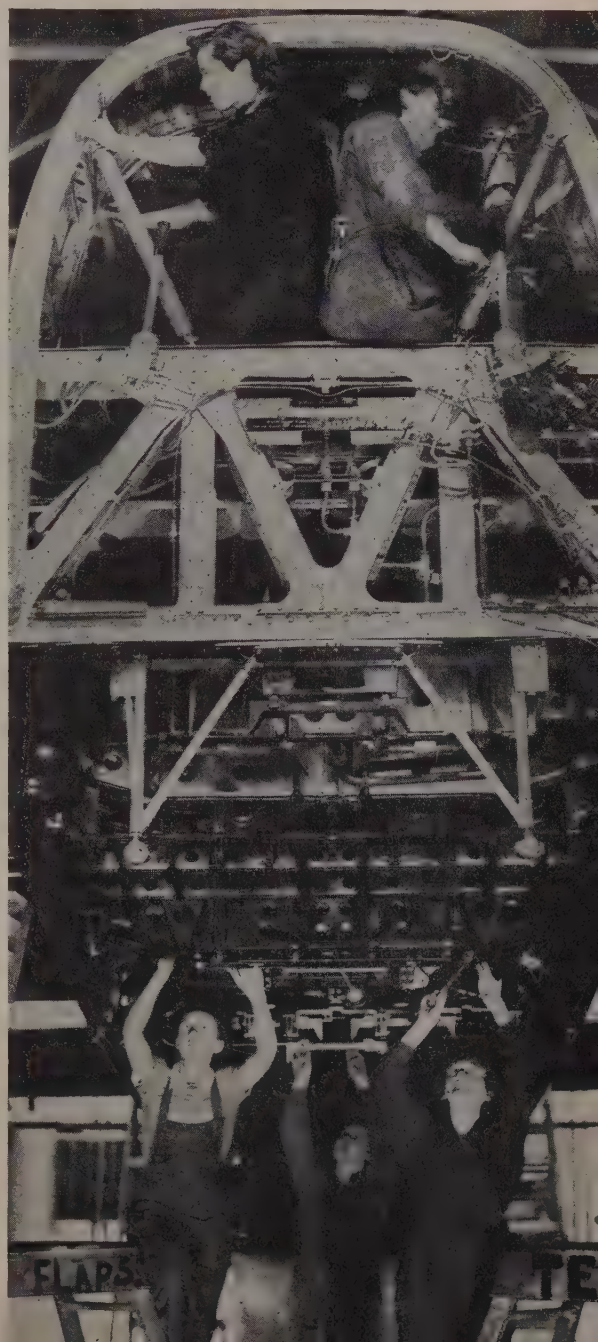
(Left) *Security.* (Opposite) *Mankind has acquired new powers. For what?*

J. R. M. Brumwell: Routledge, 12s. 6d.). In it our new powers are explained by the scientists—Bernal, Waddington, Needham, Crowther—with more than a hint that democracy, through sheer mental inertia, is letting them get out of hand. Our new instruments of understanding are analysed by the psychologists and philosophers—Mannheim, Glover, Mumford, MacMurray—less convincingly perhaps; for as they themselves confess, they are using a vocabulary in which, unlike that of science, fact can only with difficulty (if at all) be disentangled from feeling. They are dealing, too, with problems such as the scale of life's values, and the existence of God, which cannot be experimentally solved and demonstrated. Our finer sensibility, in its turn, is illuminated by the artists, the poets, the musicians, the critics—Eric Blom, E. H. Ramsden, Kathleen Raine, and, of course, Herbert Read himself. These convict us of infantilism when we react with anger to the unfamiliar and therefore disturbing modernisms: surrealist painting and sculpture, atonal music and the 'interior monologue' of *Ulysses* and *Finnegan's Wake*. Anger smoulders, too, because our powers of expression have not been trained to match our powers of impression. "Language", says Kathleen Raine, "gives a kind of mastery over things. Not being able to put something into words is a frustration, a kind of suffering."

The scientists, the thinkers, the creative artists, do not exhaust the contributors to this symposium upon a world in transition. In what category should we place the rest, the educationist, the architect, the economist, the politician, the sociologist, the business manager? All these are, or should be, the middlemen, who apply the new powers, the new thinking, the new feeling, to practical affairs. As John Summerson puts it for the architects, the new men see their profession as demanding "the whole range of contemporary knowledge brought to bear on one contemporary problem", in his own case the problem of healthy and convenient living. To put it simply, modern architecture has become functional. Instead of planning first a handsome façade, a picturesque ensemble, a pleasing arrangement of masses, into which a home or a bank or a university must be fitted as best it may, the architect creates his design around the concept of good home-making, efficient banking, active university life. But to do this successfully, he must have a knowledge of sociology, of how men behave and react in groups—it is no longer sufficient to have a mastery of the materials and the technics of building.

In education, too, the sociologist now takes his place. It is no longer sufficient for the teacher to know his subject, or even to understand the child. He must see each youngster as one of a group, as a village child, a dock-side child, a child from this or that size and type of home—in fact a child who is part and parcel of, and 'conditioned' by, his setting.

Fox Photos



It is typical of our unwillingness to face up to facts that when C. D. Darlington records the experiments that promise a new education, he can deal only with the country child, for whom a curriculum is being framed in terms of country life. But the vast majority of English children are urban, and must remain urban. Their link with the country can only be recreational. What will give to urban life the satisfying pattern, the unity of purpose that is furnished to the countryman by the round of the year, the fundamental rhythms of field, farm and garden? The answer has not been given, but it probably lies in the recognition of the closeness and frequency of human contacts that urban life entails. Gangsterdom at one end of the scale and a heart-breaking loneliness at the other are the result of failure to educate for life with the multitude. The urban child must become urbane. He must understand and appreciate the advanced techniques of organization, administration and government that the assemblage of scores of thousands of close-packed homes and businesses demands. He must understand, appreciate and participate in all the cultural opportunities—drama, music, the plastic arts, the many forms of social life—which that close-packing makes so abundant. Education for life and not merely for livelihood is an aphorism well enough understood by the educationist. But it requires him to answer the question, What should life be? There can be no return to Eden, with every Adam a gardener.

We are fast approaching the point when all the world will be but a single group; over two thousand million souls in frictional contact on a globe rendered tiny by the speed of modern transport! There is literally no longer room for old-style 'rugged individualism', whether of men or of nations. Mutual behaviour must be planned, including behaviour in respect of the world's resources. Here we return to our new powers. Our men of science have literally seen the unseeable and comprehended the incomprehensible. Briefly, their penetration of the ultimate constitution of matter has placed in their hands immense powers of manipulating it and transforming it. Rightly used, these powers can give all men life, and give it them more abundantly. Yet how tiny a band are the scientists, and how little of their work do we know, are we, indeed, willing to know, save when it is romanticized. We accept, for example, the fact that materials are soft or hard, plastic or brittle, as something that just happens to be so. But behind these qualities lies the shape of the molecules, and behind the shape of the molecules lies the number and affinities of the atoms. And when the atoms are

scrutinized matter vanishes altogether, and we find merely "arrangements of rhythmic processes". *Organized energy* is in fact the ultimate reality. God the Great Mathematician must give way to God the Great Engineer, pure science enter the service of applied.

Not only in physics but in biology new discoveries are being made which are almost terrifying in their implications of power. Our inheritance comes to us in packets from father and mother, so many distinct qualities from each. So far the contents of individual packets have not been identified, but this does not appear to be outside the bounds of possibility. Control of heredity may not lie far in the future. Meanwhile, biologists have already discovered a substance which they call the evocator, which, concealed in the egg in quantity that would not cover the point of a pin, exercises control over the orderly development of the embryo so that it takes shape after the fashion of the parents. Our forefathers noted with dread the birth of monsters, deemed to be signs and portents proceeding from the unseen world. The modern biologist can not only explain the genesis of a monster, he can even cause one to come to birth.

The mastery of life processes is not the only epoch-making discovery in biology. Physicist and biologist are working hand in hand, and the barriers between living and dead 'matter' are breaking down. Common sense is no longer enough. Still worse, common sense must on occasion be laid quite aside. An electron can be now here now there, but as it passes from here to there, it does not, as common sense would declare it must, occupy any intermediate position. Twice six is the same as six times two, and A times B , says common sense, must be the same as B times A . But this is not always so.

The dethronement of common sense, and of simple logic based on the so-called self-evident, gives us a sense of insecurity and fear, so that we may react with the angry declaration that science is all nonsense. "But", says Professor Bernal, "what we call common sense is just a convenient but crude human tool, suitable enough for a simple life, but needing to be refined and extended to use the new knowledge effectively in a complex situation." And it is essential that the public at large have an adequate understanding of the possibilities and limitations of science, for there is no part of it so obscure and mysterious that it does not have some bearing on current problems. But the actual application of science to the welfare of humanity is a social and political problem. Have our financiers, our economists, our politicians a grasp of science and how it works? They will only have it if the people insist that it shall be so.



Chungking Invictus

by O. M. GREEN

It is the paradox of aeroplanes that they can defeat armies in battle array but not civilians in cities. No capital in the world has been so ruthlessly and continuously bombed as Chungking, nor, owing to the flimsy inflammable nature of Chinese houses, has any suffered greater destruction. Yet it remains

unconquered, almost derisively defiant.

A Chinese crowd is normally timid; one man can start a panic in a thousand. And when the Japanese planes first came in May 1939 there certainly was panic for a time.

Chungking is 1400 miles from the sea. Its people had heard of the war at Shanghai and

even at Hankow 800 miles down the Yangtse, as of something too remote to be any great concern for them. The war, they said, could never reach them behind their mountain barrier. There were no shelters, no fire service, no fighter planes, a few ill-directed anti-aircraft guns; the Japanese had the sky to themselves; and when their bombs first fell the terror and confusion were dreadful.

But gradually Chungking recovered its nerve. Through the autumn and winter, when it is veiled in fog, it had a respite which with the usual Chinese resourcefulness it used to rebuild its shattered homes and prepare refuges in the rock on which it stands. In June 1940 the Japanese, having captured Ichang at the foot of the Yangtse Gorges 400 miles away, where there is a good aerodrome, came again with frightful fury. Twenty-three times in under a month they bombed Chungking. It was sheer murder. The Ministries, as they must have known, were underground; the bombers made no pretence of attacking military objectives; they went deliberately for the business and residential suburbs around the city; an American hospital was wiped out; some members of the British Embassy were injured; hundreds of Chinese houses were wrecked or burnt out. The Japanese were confident that they could start such an outcry that the Chinese Government would be forced to sue for peace. But in this as in so many other things they showed how little they understand China.

When the air raid warning sounds General Chiang Kai-shek goes at the last moment to his shelter and there he sits, silent, bolt upright—as has been said, “with the bored expression of one who has to listen to a tedious speech”. When the raid is over, he and Mme Chiang are among the first to go out and help in rescue work. They are not only an inspiration to all but a symbol of Chungking’s dogged determination not to be beaten. So fast as the Japanese knock the city down its people build it up again. Inured to the destructiveness of storms, flood and famine for thousands of years, a Chinese will run himself up some kind of a dwelling and get to work again while other people would still be queueing up for official relief. So Chungking survives, defying the enemy; and for a long time now, except for an occasional vengeful visit, he has let her alone.

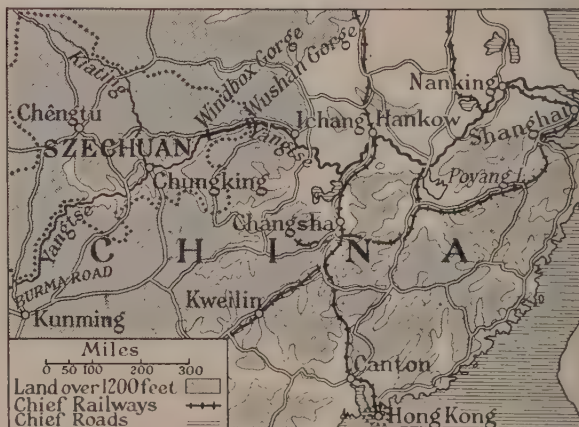
It may be that during the thousands of years in which Chungking has been

an important city she has insensibly derived pride and strength from the tremendous mountain chasms through which she is reached from the outside world—the Yangtse Gorges.

One enters the first of these great rifts immediately above Ichang and for thirteen miles one battles against the foaming waters between towering cliffs; the river is nowhere more than 300 yards wide, in places only fifty; and between winter and summer (when the snows melt in Tibet at the Yangtse’s source) the difference in level may be over 100 ft. Then come the thirty miles of the Wushan, or Witches’ Mountain Gorge—appropriate name—longest, deepest, gloomiest of all the gorges with cliffs on either side rising dead straight for over 1000 ft. And then the Windbox Gorge, so called because it was cut by a blast of the breath of the Wizard Wu-tze at the command of Yu-wang the river god, where overhanging precipices seem as if at any moment they might crash on the desolate rock-strewn shores.

There are other smaller gorges; there are long series of boiling rapids, hidden rocks and dizzy whirlpools. Here and there the country opens out, the Yangtse flows broad and tranquil by picturesque cities, temples and pagodas. But these are a quickly transient relief in a journey which only the most skilful piloting can surmount.

Until some twenty-five years ago—although two British gunboats and an Englishman, the late Archibald Little, using a steamer of his own design, had forced their way to Chungking as early as 1898—the only means of getting up the Gorges was in a Chinese junk or houseboat hauled by sixty or seventy coolies on the bank. A retired English merchant skipper, Captain Plant, built himself a bungalow near the Hsin-t’an, the worst of all the rapids, where at one time one out



Stanford, London

Looking down from the tiers of buildings above the cliffs on to the Yangtse River jetties and house-boats. Gangplanks lead to large sampans with eaved or semi-circular roofs of bamboo



Out of the wreckage of explosive and incendiary bombs a makeshift Chungking has arisen. The tall building like a lighthouse is the A.R.P. look-out tower







(Opposite) A touch of the picture-book China is provided by this Chungking father and son. The paper parasol with flower decorations and the child's embroidered shoes are traditional.
(Above) An out-door class at a Chungking school



Tu Yu Kai, the street of Banks, Chungking's richest street. Buildings here are higher than elsewhere, and look like skyscrapers. It is significant that the two chief British banks connected with the Far East have already opened offices in Chungking. The man in the foreground is a street cook, with portable stove and cooking utensils

of every three junks was wrecked, and for many years he studied the currents. His memory is justly revered by the Chinese for what he did to make the passage safer. But it remains most dangerous. Before the war there was a regular service of steamers doing the journey from Ichang to Chungking, which may take a junk six weeks, in four or five days. But they always tie up at night, and one German steamer, the *Suihsiang*,

when only three hours from Ichang on her maiden voyage, struck some submerged rocks, became unmanageable and, filling rapidly, sank in 23 fathoms of water where her bones still lie. It is a very reckless, godless *laopan* (junk captain) who does not stop at the Buddhist temple above the last of the rapids to return thanks for his safety.

Chungking, City of the Seven Gates, surrounded by great walls five miles long, is a

noble sight from the river. It stands on a high rocky peninsula formed by a confluence of a tributary stream, the Kiating, with the Yangtse. On one side flows the Great River backed by a high range of hills; on the other the Kiating with another smaller town on its further side; while on the right bank of the Yangtse are suburbs which in these latter times have stretched far and wide as Chungking's population has been swollen by refugees from the east and people have tried to get away from the bombs.

In peace-time hundreds of junks of all descriptions and sizes would be moored in every bight and bay: the river would be alive with traffic. For Chungking was the gateway and distributing centre for the wealthy western province of Szechuan (which is as big as France), and Szechuan is one of the richest areas in the world, both in things under the earth and things on it. For this reason, too, Chungking was an important banking centre and within its narrow crowded streets were many wealthy homes full of intricately carved and inlaid furniture, silken hangings and treasures of art. Rich men in China do not get away from the crowd as they do in the West. Many a wealthy house may be found in the midst of very poor streets. The owners build the masses out with high blank walls, the windows of the one-storey pavilions which form the house looking inwards upon a series of courtyards bright with flowers and fountains and pools of goldfish.

But the casual visitor to Chungking does not see these rare interiors and for him the inside of the city is far less attractive than the outside. So steep are the streets up the hillside that they are cut in steps shiny with drippings from the buckets of water-carriers and the inevitable refuse of great cities; so narrow are the streets that one can often touch both sides at once; while frequent beggars clamour for alms, displaying hideous deformities.

Yet with all this to its disadvantage Chungking possesses a strange charm. In the shops of Tu Yu Kai, the city's Bond Street, on the Kiating side, are treasures of carved jade, agate, amber and ivory; buckles, brooches, bracelets and golden ornaments inlaid with kingfishers' feathers; carved wine-cups, gorgeous tapestries, and such silk as to my mind no other part of China can produce; also many curious Chinese medicaments, compounds of ox gall, which give a man courage; midsummer root, which deprives him of speech; and decoctions of mosquitoes' stomachs to cure him of fever.

For centuries Chungking, as I have roughly sketched it in its pre-war days, lived its own life unaffected by the outside world. Szechuan

was one of the most conservative provinces in China, largely controlled by great landowners who carried down to the 20th century the habits of their ancestors in Confucius's time. It is curious to think that the great Communist Chief Chu Teh, perhaps the most skilful guerrilla leader alive, was the son of one of these old wealthy families of Szechuan and was himself at one time the typical, old-world official with a numerous harem. And what it was that caused him to break with his former life and throw in his lot with the Communists as he did in 1928, perhaps even he himself could hardly say.

In October 1938 the Japanese at last fought their way up the Yangtse to Hankow, whither the Chinese Government had retreated after the loss of Nanking in the previous December; and into Chungking poured all the Government and its officials, politicians, business men, manufacturers, swarms of students from the ruined universities of north and east, hordes of homeless refugees fleeing from the invader. Canton had been lost about the same time as Hankow, and Free China was thus cut off from the world except by the Burma Road, which General Chiang's foresight had ordered to be built while the Chinese were still defending Shanghai a year earlier, and the ancient Silk Road north-westwards to Russia. Within three years the Burma Road was to be closed too, while Russia could no longer give the help she had given to China before Germany attacked her.

The Chinese have been said to lack organizing ability, and by western definitions of the phrase perhaps they do. But they have their own ways of managing things, as Chungking has eloquently proved. No city could have been less prepared for the burden thrown on it in the autumn of 1938. Apart from the usual *yamen*, or magistrate's residence, the Customs house and a few guild halls, it had no buildings suitable for Government offices; no factories adaptable for war work; and the population was already so dense that to accommodate all the newcomers seemed a sheer impossibility. In such conditions the Government had to find houses in which to carry on the administration, to provide work for the penniless refugees, rig up factories in which arms and ammunition could be manufactured, and all the while to fight a cruel enemy equipped with every contrivance of modern warfare.

Somehow the Chinese resourcefulness, which every foreigner in China has daily cause to admire (from the cook's ability to provide a sumptuous dinner at ten minutes' notice for half-a-dozen unexpected guests upwards), has solved the problem.



Water is not on tap in Chungking: coolies queue up to fill their wooden tubs. The steps, in which the town's steep streets are cut, drip continually with water from these buckets



A Chinese travelling bookseller carries his stock about with him, hung loosely from 'branches' of long bamboo poles



Photographs from the Ministry of Information



So steep is the promontory on which Chungking stands that many of its streets are simply long flights of steps on either side of which houses stand on stilts. The house in the foreground is typical of the shacks hastily run up in place of houses destroyed by Japanese bombers. (Left) Young customers of a Chungking street hawker

Before leaving Hankow, the Government had stripped it thoroughly (particularly the Japanese Concession) of all machinery and tools, of which 120,000 tons were carted up the Gorges to Chungking. More machinery has since been obtained from abroad. Besides numerous well-hidden arsenals scattered about Szechuan, which turn out a sufficiency of small arms and even some smaller guns, cotton mills and silk filatures have been built deep under ground. Iron and coal mines have been opened, and all the production of Szechuan's latent wealth, but a fraction of which had been exploited in the old days, was stimulated and enlarged. Skilled artisans were smuggled between the Japanese armies from Shanghai; and among the peasants the wonderful industrial cooperative societies (of which there are now over 2000) were started to give the peasants lucrative work and to provide China with blankets, clothing, candles, cartridges, leather goods, furniture, household utensils and a mass of other commodities. All these activities are of course spread over a vast area, for 'Free China' measures some 1,800,000 square miles. But the impetus has come from the once remote, conservative Chungking.

Chungking has also become a great university city. Nowhere has Japan's destructiveness been worse than among Chinese colleges, which she rightly recognized as the birthplace of the progressive ideas that she most hates. But, undismayed, over 10,000 students, youths and girls, tramped all across China carrying such books and scientific equipment as they could salvage to start new universities in the west. There are three centres, Chêngtu, capital of Szechuan; Kunming, terminus of the Burma Road; and Chungking, in which the whole of the Central University of Nanking has been re-established with students from three other universities. Chungking contains a total of nearly 3000 students, youths and girls, for in China co-education is the rule.

They have endured great hardships, starting their university in sheds of bamboo matting and caves, with the most meagre supply of books and writing materials, and subsisting on very scanty diet. But they have pulled through. British and American universities have sent them books and equipment; better buildings have been put up; and the Government has found funds. The Chinese

Government has been blamed for not allowing the students to fight. But it argues that they can serve their country better by preparing themselves for the work she will require of them after the war.

That is what Chungking, indeed all China, is preparing for. Life is very hard. Inflation due to China's isolation is terrible, prices are 300 or 400 per cent. above pre-war level. The result is a curious redistribution of wealth. While the salaried classes can barely buy enough food and go threadbare in their worn-out clothing, the people who can fix their own price, lorry-drivers, wharfingers, rickshaw coolies, etc., make thousands of dollars monthly. There are bitter complaints, too, in Chungking of food hoarders, of rich men who evade their fair share of taxation, of political discord and intrigue.

Such conditions, the inevitable outcome of the strain of seven years of war, are by no means peculiar to China. They do not in the least affect Chungking's and China's will to win and their vision of the future.

Chungking indeed has made history. Within her walls has met for the first time the elected National People's Political Council, 'China's embryo Parliament', forerunner of the democratic Constitution which is to be adopted after the war. There, too, have been formulated the vast schemes for the development of the far-off west and northwest on the borders of Tibet, which are already changing these little-known regions into busy centres of activity. And when the war is over Chungking will be richer, more important than she has ever been. For the intensified development of West China's natural wealth brought about by war really means that a new economic state has come into existence, whose produce will flow out westwards through Burma. And this will mean a better balance all through China, commercially and politically, than in the past lop-sided century when all business and industry had congealed along the coast.

So Chungking has been born anew. The picturesque old city, moving easily along the rut traced by the custom of centuries, has been shaken to the core by war, by suffering, by the influx of new faces and new ideas, by realization of the deadly threat to all she believes in that is implicit in the Japanese invasion. And from the fires of the Japanese bombs Chungking has risen to new life.

'Bevin Boys' at Work

by B. L. COOMBES

I CAME to coal mining more than a quarter of a century ago and was eager to find out what happened in that underground world which is away from the sight of ordinary folk. Very similar must be the coming of those whom we call 'Bevin boys' in this present year. I will try to compare what I found with what they will experience after the changes of that long period.

Getting to the work was, of course, the first consideration. Most mining villages were secluded in the early days, with the houses clustered as near the pit as possible. That meant the choice of work was limited, for there was no conveyance for the workers. If you worked away from the local colliery it meant walking; and for some years I walked three miles across open mountain each way. When it was summer we sweated up the slopes; in the winter we soaked and squelched our way along.

Then came the making of roads. Decrepit lorries were used to take us to work—our dirty clothes would have spoiled any good vehicle—and the fares were low. We were very pleased when an old Ford van started to travel on that road. Twenty-eight of us piled in although it was supposed to hold fourteen. Our homeward journey was chiefly downhill, and as the driver had warned us that his brakes were useless we were hopeful that nothing would get in our way and felt no more safe in that quivering conveyance than we had in work.

Later, again, a couple of ancient char-à-bancs without any covers arrived. We sat profanely still while the rain fell on us or the snow made ineffectual attempts to whiten our coal-grimed clothes. We travelled slowly, but not surely. A hearse and its burden overtook us easily one day and we felt that was the absolute limit. A petrol leak delayed us one dark morning and the driver tried to locate it with the aid of an open flame lamp. He found it, easily, but we managed to scramble to safety. After warming our bodies at the blaze we trudged off to work while the driver hunted for a handcart to wheel what was left of his char-à-banc home.

Now, all that has passed. Rows of buses wait for us after each shift. They are clean buses, comparable to those on the passenger services, for we no longer take our dirt home with us. Usually they have an attractive

conductress in charge and she knows all about miners and their likes or dislikes. Men travel here to work from a radius of twenty miles and so there is no longer compulsion to live near your work or to limit your choice of colliery.

Inside the workings the lighting is much better, and that is important both to a man's feelings and to his output of work. His lamp is the miner's lifeline; he must take it to guide his every action. The old-time oil lamp had to be handled most carefully as the least jar would knock out the feeble light. Today electric lamps have largely superseded the oil-flame lamps and they can be slung about at any angle without any effect on the light. Main roadways and engine-houses underground are often supplied with electric light. A proportion of oil lamps must still be carried so that warning will be given if gas accumulates.

First aid used to be primitive. Often we carried injured men for long distances on improvised stretchers. I have seen them taken home in coal carts, and baker's vans. We used our muffers for bandaging or ripped our singlets into strips. Today we have underground telephones, well-equipped cabins inside the workings and modern ambulance cars waiting outside to take the casualty swiftly home.

My first experience of coal-winning was hand cutting under the seam. Monotonous and very hard work this was, for it meant chipping inch by inch into the solid coal until we had cut a yard or more underneath, of sufficient width to loosen the stretch of coal seam. There was a knack of hitting and twisting from the wrist which took a deal of learning when a man was lying down or

(Opposite, top left) On left, oil-flame lamp for detecting gas; centre, electric lamp for repairers or colliers; right, carrying lamp used when walking much underground; (right) section of repairer's tools. In addition each man often has hand and compressed air boring machines, also smaller and larger saws and measuring rods. (Bottom) Modern protective equipment: safety helmet, boots with reinforced toes and padded tongues, goggles and gloves. The latter are rarely used because of difficulty in gripping



Photograph by Eric M. M. M.





Fox Photos

(Above) Yearling fell ponies, used for work in the smaller seams. Larger ponies work in big seams. More than 25,000 are still in the mines though machinery has reduced their numbers. Treatment has improved during recent years but they are always exposed to the risks of mining. (Opposite) A risky job—steering a longwall coal cutter alongside a fault in the seam. Note the posts, sloping to meet the angle of the roof. Should this powerful machine displace one of these supports the coal cutter and operator might be buried by falling debris

crouching under the roof. That continual hammering for hour after hour caused our hands or elbows to become inflamed—that way developed the complaints which we termed 'beat hand' or 'beat elbow'. A proportion of the coal is still cut in that way but by far the greater amount is now worked by machinery.

These coal-cutting machines are driven by electricity or compressed air, whichever is most suitable for the type of colliery. They travel along the edge of the coal—the 'coal face'—on skids, drawn by a fixed pull. At the rear a revolving chain fitted with cutting picks rips out the coal to a depth of a yard, or more if deemed advisable, and the machine moves forward at about a yard a minute. This machine can do in five minutes what a really expert miner would take a day to do.

The hand-cutting collier usually had a length of about thirteen yards of coal face under his control. When he had the coal loosened his boy, or mate, turned it back to the tram and then filled it. With the machine method a conveyor frequently supplements the cutting machine and the coal is just thrown from the collier's side right onto the moving belt or trough. This way the

loosened coal slithers away like a black river. The conveyor may be a hundred yards or more in length and at the end of it the coal tumbles into the trams. The workers in this method do not need the same degree of skill, and certainly most of the hardest work is eased. There is, however, a deal of noise and that is a danger under doubtful roof; while frequently the added dust brings another menace to the health of the miners.

This method of working is fairly automatic and does not give the varied experience of the man who has to work his own stretch forward. It teaches nothing of repair work and the many ways of putting the roadways into proper shape. At this work the middle-aged men are skilled, trained by many years of fighting moving roof and crushing sides. The younger men used to work with the older, gradually absorbing the knowledge as they conquered the mining problems that each day brought. By that method the ranks of the repairers were replenished steadily when the older men ceased to work. Machine mining brought a gap in that replenishment; and from that comes one of the sores of mining. The highest skilled men have to do the repairs while the younger ones who fill a lot of coal



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have a higher earning power—and it rankles.

The men I most admire are the repairers, and there has not been so much change in their work. Before the war shortage they used steel arches instead of timber—a spanner had replaced the hatchet to a large extent. Yet, as always, they are still in danger each shift as their job is to safen the places for the colliers, hauliers or engine drivers. Their tools have not altered greatly during that quarter of a century. Mandrels, hatchets, saws, shovels, crowbars are still needed. In most places now the boring tools are power-driven and the use of the pneumatic pick has become general.

Before I pass from the need to train men for the different kinds of mine work I want to explain that there are at least forty sorts of jobs underground.

There are parts of some mines not suitable for machine mining; in these the passing years have made little change. Yet in most of them a double, sometimes a treble, shift is worked. Often this system has robbed a man of the pride he felt when keeping a neat stall or roadway. He could work his coal in a way which would allow the roof pressure to slacken the fringe of his coal ready for the morrow—and

that loosened coal would be waiting for him the next day. Now, some other man will be working there during the interval and so each shift must scramble all it can to get a good total. This often leads to slovenly working; sometimes it brings accidents. The choirs, dramatic societies, bands and sports clubs which are part of mining life suffer badly under this three-shift system as their members are constantly changing shifts or working awkward times. It has a bad effect on both the home and social life of the community.

Yet I doubt if it gives the increased output which was expected. Recently I visited a colliery in Leicestershire where only one shift was being worked. In similar conditions their output from that one shift was nearly equal in coal-getting to our colliery when working two. They were definite that the single shift was the most profitable.

There is a price list for each seam. Many places are still working on lists made before I started work. Of course, the percentage payments on top of the standard rates have varied and in war-time the various bonuses and awards have increased the wage. Many lists have been adapted to suit the alteration of machine mining.

Research into mining is going forward all the while and the scientists have done a great deal for us both in easing industrial disease and in finding new uses for coal. Probably the future generations will condemn us for the way we have wasted this most precious mineral. All accidents are docketed and analysed and in these areas there is an attempt to hold post-mortems on every dead miner so that the effect on his lungs of coal dust can be watched. Dust diseases are taking a heavy toll of our mates and to ease it water sprays are being fitted behind coal-cutters, at the conveyor ends, and over the main roadways. There is also water infusion in which a hole bored into the coal is pumped tight with water, then sealed. This water works its course behind the coal slips and loosens the coal; at the same time it damps the dust. Slowly we are conquering the dreaded dust.

We use safety boots with strengthened toe-caps and padded insides, helmets and eye-shields. We have convalescent homes and rehabilitation centres for miners in most cases. Some use masks but they have not been taken up generally. You see, we work at a fast speed and have to inhale artificial air; in those conditions a man wants no restrictions on his breathing.

Many collieries have thirty, or more, engines underground. I do not notice much difference in the design although more are in use. This, with the machine mining, has brought the need for more fitters and mechanics. A large number of very small engines are in use nowadays. They can be pushed into quite a small space and do the work of one horse in pulling up a slope.

There are still thousands of pit ponies at work underground and the time must surely come when there will be no need to take them under at all. Very surely the ponies will welcome it, and most humane men. I think they are treated better than in the old days. They look better and the work is certainly easier. The Pit Ponies Protection Society has done a deal of good. Their propaganda was necessary.

The old mining homes were huddled together, grey street after grey street with no relief of colour. They completed the drab picture on which the pit dust fell continually like dry rain. The returning collier stumbled along the rough pavements and his working clothes shed a halo of dust after each move. His wife had wearied herself making the place bright for his homecoming. Very swiftly he negated all her efforts. The heavy tub was dragged in, steam and dust filled the room, and dirty clothes dried on the guard before

the fire. It must have been a heart-breaking task for those generations of women—that so many of them persevered is a great tribute to the mining women. That men, women and children could live in such surroundings and still try to live decent lives is a reminder of the unconquerable spirit of the workers.

That problem is being eased. Now the worker can travel away from such surroundings and the new homes are being built in brighter and pleasanter conditions. Yet more of these homes are badly needed and their building seems so slow.

Greatest boon of all at present are the pit-head baths. Here a stream of black-faced men go in, strip off their working clothes and hang them in lockers to dry, then lose their grime under a shower and walk across to another section of lockers where their home clothes are hanging, nicely warm. Then, once again normal human beings, they move along through the canteen doors. The usual war-time refreshments are served by attendants who are the daughters or sisters of miners. The bus drivers sit waiting while their passengers drink their tea or argue about the work they have done. When the time for going is shown on the clock, the bus drivers give the signal and the canteen quickly becomes empty except for those who live near by.

For some strange reason our mining canteens have lagged behind the factory canteens in the supplying of hot meals, but continual agitation is improving that service. The Miners' Welfare Commission builds these baths and canteens and they allow nothing shoddy in the construction. They are fine buildings; ours cost £23,000. When it is completed the building is handed over to a joint committee of the men and management who must keep it financially sound. Each miner with us pays tenpence a week for the baths and the canteen is run separately. What the baths have meant to our housewives is difficult to exaggerate. I can still remember the astonished stares at my home when I arrived home clean from work. I wonder how many children have been saved from scalding in the tub before the fire by the building of pit-head baths.

The Welfare Commission—born of the Sankey Inquiry in 1919—has another claim to our gratitude. In somewhat similar conditions it has built halls, libraries, sports grounds and parks in the mining villages. This has made a great alteration in our lives and our feelings. When I first came to live in a mining valley the public-house was the only place to spend the evening—unless a chapel was open and I had the inclination to enter.



Wyn Morris

The shifts meet. Black-faced Bevin boys coming 'off shift' tell of the happenings to the clean-faced boys who are ready to start their own shift's work. They are grouped around a repairer, well experienced in the problems of the underground world to which they are newcomers

If it rained we sheltered in shop doorways, under bridges, or alongside walls. It is easy to visualize the mentality which developed under those conditions. Often the time to go to our dangerous work brought a feeling of relief. That, too, has altered by this Commission set up by a humane judge. On fine days now we can walk or play games in the park; when it rains the Institute is warm and comfortable. A good circulating library is there and it is very well appreciated.

So in many ways the Bevin boys will find our mining areas much pleasanter places in which to live. They will find friendliness and comradeship; it has always been there, with the continual craving for education and a better standard of life. They will see men working hard, living dangerously, and yet laughing at anything life can do to them. If they behave well they will be treated well.

Yet in one thing I feel we have slipped back, very badly indeed. Somewhere in that quarter of a century a sad thing has happened—we have lost our pride of craft. There are several causes: the introduction of machinery; our ideas of educating a man into a clean

collar job; our despising of the manual worker; the insecurity of the work; our shameful waste of the men and the immensely valuable commodity they produce.

What of the future? To make that more popular we must foster not only the Bevin boys but those who are born in mining homes, for they are most surely the most promising miners of the future.

These boys, natives of the mining areas, have a long start on the newcomers because mining has been in their blood, in their thoughts and in their homes. They have listened near the fireside to the older men describing their work; indeed, many of their mothers know well how the seams are worked and very surely what price is paid for that working.

The tragedy is that they also saw cruel things happening to those homes; things which have driven them to other jobs and areas. Some of the clouds have lifted over our valleys and we hope that the dark days will never return. Most of us welcome the new recruits. They will learn a great deal; possibly we too will gain in knowledge by their coming.





Photographs by Oscar Marcus

"Any Coal?" Opposite, is the man at the other end of the industry; the one who delivers the coal. Above, is his mate . . . possibly thinking of those relations of his who were taken to become pit ponies

Australia Looks Ahead

by GEORGE G. LOOKER

THE major problem for Australia in the post-war world is essentially one of accommodation—adjusting her British civilization and connections to her geographical position in the Pacific on the fringe of the Far East.

In the past the tendency has been, on the whole, to concentrate attention on British connections and to regard China and Japan as distant, belonging to the Far East and not to Australia's Near North. Not that Australians considered these countries geographically distant. But they had accepted the words 'Far East' as meaning something strange and peculiar. It was indeed the geographical nearness of this 'mysterious East' which contributed largely to Australians regarding Japan, for example, as a perpetual menace.

The most consistent aim of Australia's foreign policy was, therefore, to protect trade and connections with Britain. It followed that the policy towards the Far Eastern countries was one of defence—military defence and racial defence.

Recent events, particularly the Australia-New Zealand Agreement and Mr Curtin's proposals on more effective British Commonwealth cooperation, suggest that a more determined effort is being made to adjust Australia's foreign policy in accordance with the demands of her Pacific situation.

It must not be thought, however, that the Pacific war has brought about a complete change in Australia's attitude. A close examination of recent trends shows that, while there have been new developments, there has been no startling departure from a policy which had, in broad outline, been settled by the end of the 19th century.

* * *

The 'White Australia' policy was born on the goldfields in the second half of the last century. Chinese immigration to the fields had increased rapidly. Friction resulted and legislative attempts were made by the Australian Colonies, as they were then called, to limit the number of immigrants on the grounds that minorities provided awkward problems and that such a flood of coloured people might endanger the standard of living which the young and vigorous Labour Movement was trying to establish. The controversy continued as a subject of heated debate

until and beyond the Federation of the six Colonies, when it became fixed policy, an article of national faith. While the Immigration Restriction Act of 1901 sought by a subterfuge to avoid any charge of direct exclusion of Asiatics, its application was directed principally against the Japanese and Chinese.

The early controversy on immigration was centred around the Chinese. The fear was of peaceful penetration, of the flooding of an Anglo-Saxon community which was small in numbers and in cultural and political isolation. The defeat of China by Japan in the war of 1894-5 changed the menace from one of peaceful penetration to the possibility of military assault. Japan took the place of China and was becoming a first-class power in the Pacific. She might attempt to accomplish by force what had been forbidden the Chinese by legislation. The Anglo-Japanese Alliance of 1902 tended to quieten the fears aroused by the Japanese victory of 1895. Whereas the Japanese military success against Russia in 1905 did not appear to cause much public misgiving, the official reaction was to introduce compulsory military training in 1909 and to establish a separate Australian Navy in the following year.

The desire to keep possible enemies at a safe distance from the Australian mainland was not expressed for the first time in the Australia-New Zealand Agreement of January this year. The Australian colonies had urged Britain to occupy New Guinea as far back as 1864: at that time the fear was of German designs. (In 1884 Germany did take north-eastern New Guinea, New Britain and New Ireland and held them until 1914.) This clamouring for British action may not have been a move in the direction of positive defence, but it was certainly an attempt on the part of Australia to exclude foreigners from bases which might be used for attacks against the mainland. The attitude of Australia's representative at the Peace Conference revealed quite clearly how distant the Dominion wished to keep Japan from her own shores, although Japan was her Pacific ally in the war of 1914-18. As a counter to Japan's claim to the islands north of the equator, Mr W. M. Hughes asked for the outright annexation of the islands to the

south of that line. Failing that, he urged the creation of a mandate which would not compel Australia to adopt an open-door policy in trade, nor compel her to allow the free entry of foreign nationals. And Mr Hughes had his way: a special C-class mandate was granted. Without delay the Commonwealth Government extended to the mandated territory the immigration laws already in operation in Australia. Mr Hughes was voicing the fear and determination of the public when he told the press: "There could be no open door in regard to the islands near Australia. There should be a barred and closed door—with Australia as the guardian of the door."

The League of Nations and the growth of collective security allayed Australian fear by creating a state of affairs much desired by small nations. Trade with Japan increased. In fact, the big industrial expansion and export drive, launched by Japan during the world depression, was beneficial to Australia since it provided an invaluable market for her principal exports at a time when other markets had contracted. Australian imports of Japanese piece-goods also increased.

The various economic and financial groups within Australia expressed divergent views about this new growth. Some envisaged a more profitable trading and political future for Australia in the Pacific; others spoke of 'dumping', of cheap labour and unfair competition. Favourable trade figures, however, could not be denied.

In 1936 the Commonwealth Government announced, without warning, a 'trade diversion' policy. Higher tariffs were placed on all imports except those from other countries in the British Empire. What were the reasons? Japan was a 'good' customer, that is, the value of Australian exports to Japan was greater than Australian imports from Japan. The purpose of this policy was not to protect Australian industries, since few of the goods Japan was sending to Australia were manufactured in Australia. The Commonwealth Government must have anticipated similar restrictive measures being placed on Australian exports and, since Australian exports were greater, she would suffer more than Japan. Furthermore, it could hardly be expected that as a compensation Britain would absorb what Australia lost in the Japanese



Stanford, London

Australia's problem is largely geographical—an essentially British civilization on the fringe of the Far East

market. (In 1934-5 Britain took 56.25 per cent of the total Australian exports; Japan 10.75 per cent.) The immediate result was a financial loss, much regretted by primary producers. Trade with Japan slumped and never fully recovered.

There seems little reason to doubt that pressure had been brought to bear by British textile manufacturers whose goods had been displaced on the Australian market by cheaper Japanese products. And British economic and financial interests in Australia were not inactive.

But even these facts do not completely satisfy. The answer is found in Australia's British connections on the one hand, and, on the other, the general attitude to Japan. Developments in the Far East since 1931 were disturbing. In that year Japan had invaded Manchuria. Australia's first defensive hope, collective security, had failed. The 'menace' from the north was growing more powerful and aggressive. The problem, then, was not one of choosing either the British or the Japanese market, simply as markets, though the relative sizes of the markets did enter into the debate. There were other factors as well. The British market was more stable. Furthermore, it was on the British Navy that Australia relied ultimately for defence—very important to remember when Japan's aggression of 1931 and Australia's fundamental fears are taken into account. It was a case of sacrificing the market of a nation whose people she hardly understood and who were now threatening the peace of the Pacific.

Australia's fears were intensified in July 1937 when Japan started a new attack on China. Japan had already resigned from the League of Nations, denounced the Washington Naval Treaty, refused to renew the London Naval Treaty and, perhaps even more menacing, had announced her intention of taking full possession of the islands to the north of the equator over which she held a mandate. The Italian invasion of Abyssinia and the Japanese signing of the Anti-Comintern pact made Australia's position even more precarious. Would Britain become involved in a European war which might render her incapable of giving Australia adequate protection in the Pacific?

* * *

This brief historical summary makes more intelligible the Australian reaction to the fall of Singapore in February 1942 and her subsequent relations with both Britain and the U.S.A. It also points to certain factors which

are essential to an understanding of Australia's foreign policy.

In the first place it must be remembered that Australia is preponderantly of British stock, not afflicted with any minority question. Then there is her geographical position. She is, as it were, an offshoot from Europe isolated in the Far East. She has a population of only seven million people in a continent with a coastline of over 11,000 miles. For certain commodities, mainly wool and wheat, Australia must find an export market and the biggest percentage of her exports are sent to Britain. Although immediately before the war most of her oil came from the Netherlands East Indies, Australia is not dependent on the Pacific area for any of her essential raw materials. Unlike Canada she has no strong neighbour of similar outlook on whom she can depend for defence, and unlike South Africa she is not far removed from potential enemies. Not only is the major portion of her trade with Britain, but the protection of her trade routes has been provided by the British Navy. The British market is 'constant'; other markets, including the Far East, are 'variable'. Into the scales on the side of British trade connections must be thrown such factors as British investments in Australia. The scales, therefore, are weighed heavily in favour of the maintenance of the fullest and best possible relations with Britain.

But there are in Australia some who do not subscribe so wholeheartedly to an exclusively pro-British foreign policy: for instance the farmers, whose products cannot be completely absorbed in British markets. And the tremendous growth of war-time secondary industries will possibly add another group to those who dislike any suggestion of a closed Empire economy. In certain manufactured goods there is every likelihood that the Australian home market will be more than satisfied and manufacturers will then seek markets abroad. There are also those Australians who would have the Commonwealth more independent of British influences. These people are not anti-British; they argue that a more independent Australian policy would make for greater stability in the Pacific area and permit Australia to make her own particular contribution to world affairs.

But the fact remains that the balance of opinion and the weight of interested parties have in the past been definitely in favour of a foreign policy which was in all essentials fully lined-up with the foreign policy of the United Kingdom. Australia was still, more or less, a stranger to the Pacific and most Australians were better acquainted with the

history and traditions of Britain and Europe than with China, Japan or the peoples and islands of the Pacific.

* * *

The recent agreement signed by Australia and New Zealand and Prime Minister Curtin's proposals concerning British Commonwealth relations throw some light on the question of Australia's future attitude to the Far East.

Take first the Australia-New Zealand Agreement.

The Prime Ministers of Australia and New Zealand, with other representatives of the two countries, met in Canberra from the 17th to the 21st January to discuss matters of common concern. On January 21 an agreement was signed, covering a variety of subjects, ranging from questions of defence to the welfare of Pacific Islanders.

The major portion of this agreement is given to defence and collaboration between the two Pacific Dominions on this and other matters. The defensive measures show that the Japanese attack in December 1941 confirmed Australia's long-standing fears and that the

(Bottom) Sydney—a city of over a million inhabitants. The six State Capital cities of Australia account for 46 per cent of the total population. (Top) Donkey team transport in the interior. Behind the cities are the wheat and sheep stations and beyond is the “dead heart of Australia”, with little or no prospect of development



By courtesy of the Australian Information Bureau, London



fall of Singapore had left its mark. This is what the Agreement says: "The two Governments agree that, within the framework of a general system of world security, a regional zone of defence comprising the South-West and South Pacific areas shall be established and that this zone should be based on Australia and New Zealand, stretching through the arch of islands north and north-east of Australia to western Samoa and the Cook Islands" (clause 13). The two Governments agreed to the establishment of "permanent machinery for collaboration and cooperation", continuous consultation, joint planning, interchange of military staffs and coordination of munitions production.

That Australia is thinking in terms of defence is not startlingly new. This is but an extension of certain proposals Australia had made in the past, such as the request to Britain to take possession of New Guinea and Mr Hughes's insistence that the islands to the south of the equator should be under special mandate to Australia. But there is an element of novelty in these defence measures: there is a more positive, a more independent attitude. Australia is not just waiting for the bigger powers to produce their schemes. Australia, with New Zealand, is taking the initiative.

On the other hand, it must not be thought that Australia, with her sister Dominion, considers herself strong enough to meet the defensive needs of the south-west Pacific. The Agreement proposes (clause 34) that "there should be a frank exchange of views on the problems of security . . . between properly accredited representatives of the Governments with existing territorial interests in the south-west Pacific area or in the south Pacific area or in both" (*i.e.* Britain, the U.S.A., the Netherlands, the French Committee and Portugal, as well as Australia and New Zealand).

It can be taken, therefore, that neither Australia nor New Zealand, nor both together, have any false ideas of their military strength. The argument is rather that, whereas they used to be more or less willing to accept the decisions of those who merely had "interests" in the south-west Pacific, Australia and New Zealand wish it to be remembered that they have more than interests, that they live in that area and intend putting forth concrete suggestions and participating in the maintenance of its security. The protection of Australia and New Zealand will not, in the future, be merely an afterthought of the Big Powers, it will be the primary concern of the two Dominions themselves.

Ideas on defence are not confined to the region of the south-west Pacific. Throughout the Australia-New Zealand Pact there is evident an underlying hope that a world system of collective security will be re-established—an organization in which the two Dominions have every intention of playing an active part. "The two Governments regard it as a matter of cardinal importance that they should both be associated not only in the membership, but also in the planning and establishment of the general international organization referred to in the Moscow Declaration . . . for the maintenance of international peace and security" (clause 14).

It is important to note that interest in the south-west and south Pacific areas is not only defensive. A considerable portion of the Anzac Pact is concerned with the "welfare and advancement of native peoples of the Pacific". The doctrine of trusteeship, in accordance with the principles of the Atlantic Charter, is regarded as applicable not only to the territories coming under the control of Australia and New Zealand, but to all colonial territories in the Pacific. To attain more efficient administration and collaboration in the Australia-New Zealand area, between the various authorities concerned, it is proposed that a regional organization be set up, which might be called the South Seas Regional Commission, having representatives from the United Kingdom, the U.S.A., the French Committee and Australia and New Zealand. (It is difficult to understand why the area was not extended to include the Netherlands East Indies and Portuguese Timor.) By this means it is hoped to establish a common policy in social, economic and political development. The aim is "the ultimate attainment of self-government in the form most suited to the circumstances of the native peoples concerned". But the Commission is given no authority. Its function is to "make and publish periodical reviews of progress" and to make recommendations. What power has it to extract information from a reluctant mandatory or to compel the application of its findings in territories badly administered?

The Agreement thus points to the development of a greater Pacific consciousness and a new-found and vigorous independence. A war both in Europe and the Pacific and the consequent limitations placed on the British Navy, the disaster of Pearl Harbour and the near approach of the Japanese to the Australian mainland—these events taught Australians a lesson. Australia, with New Zealand, is not merely expounding theories of defence.

She has made the first move by presenting concrete proposals. She is also proposing to bear a greater share of the burden of that defence by declaring her intention of policing or sharing in policing the defensive area. In some clauses of the Agreement there is even a hint of what might be called Pacific jealousy, an almost truculent bearing. These signs of healthy and commendable nationalism are particularly evident where the two Governments declare that, in international practice, the war-time construction of naval and air installations "in any territory under the sovereignty or control of another power, does not in itself afford any basis for territorial claims or rights of sovereignty or control after the conclusion of hostilities" (clause 16). There is also the declaration that there should be no change of control of Pacific Islands, "except as a result of an agreement to which they are parties or in terms of which they have both concurred" (clause 27).

* * *

What part will Australia play as a member of the British Commonwealth of Nations?

In August of last year Mr Curtin, the Prime Minister, said he believed that an Imperial Consultative body would emerge from war-time relationships within the British Commonwealth and Empire. He went on to suggest that it would make for more rapid and continuous consultation between members of the Commonwealth if a permanent Secretariat were set up, apparently on the lines of those established by the recent Agreement and now functioning in Australia and New Zealand. In public statements during his recent visit to London to attend the Conference of Empire Prime Ministers, Mr Curtin laid particular emphasis on the need for establishing a permanent Secretariat. When questioned about his proposals at a Press Conference in Ottawa, on June 1, he said: "We must have continuity of examination of our joint problems."

Mr Curtin was, in effect, voicing a complaint about lack of full and timely consultation between members of the Commonwealth on matters which are the concern of more than one. He was suggesting an improvement in machinery. But he was doing more than that. He was acknowledging that, when it came to the bigger issues which led to peace or war in Europe, British foreign policy was important to Australia and the other Dominions in that on two recent occasions these Dominions had followed Britain into war. He was implying that it would have been more satisfactory had there been fuller and more continuous consultation before the crises. Also, that it might

have been more effective for the maintenance of world peace if, after consultation and in the event of agreement between all members, declarations had been made in the name of the whole British Commonwealth and Empire.

There is no suggestion of the surrender of sovereign power to a super-imperial body: Australia's independence is too precious for that. "You must remember", he said at his Ottawa Press Conference, "that the [British] Commonwealth consists of self-governing Dominions and each is responsible to its own people." Nor is there a false hope that the British Commonwealth will always have a common foreign policy: the problems of each Dominion are too diverse. What Mr Curtin was saying was something like this: the link between Australia and Britain is such that important declarations made by Britain, even although only in her own name, are of vital importance to Australia. Therefore Australia wishes closer consultations before important decisions are reached or declarations made. Where it is possible to agree to a common policy for the whole British Commonwealth, so much the better for the Commonwealth as a whole—and perhaps for the world.

That is not the whole story. It seems obvious that Mr Curtin has no intention of confining himself to expressing opinions on matters referred to him by Whitehall. When it comes to Pacific affairs he expects the reverse to happen. The Australia-New Zealand Agreement makes that plain. It was the Australian Government which called the Conference together, not Britain. Australia expects to lead and to obtain Britain's aid in the south-west Pacific in the same way as she is willing to give her assistance in Europe. To avoid confusion and the cancelling out of opposing opinions, the Anzac Pact lays it down, in clause 3, that "there shall be the maximum degree of unity in the presentation elsewhere of the views of the two countries"—Australia and New Zealand.

The Pacific Dominions are marshalling their forces. By attaining unity they hope to gain more easily the backing of Britain and, having obtained Britain's voice, these small nations will have greater bargaining power and influence in their dealings with other Pacific countries.

* * *

What of relations with the United States? New links between the two countries were made in the days immediately following the fall of Singapore. Will these be strengthened or weakened?



(Left) Industrial worker at his furnace. The war has encouraged a tremendous development in Australian industries—in the building of 'planes, tanks, the making of optical instruments and the construction of destroyers. (Opposite, left) Mr John Curtin, the Labour Prime Minister of Australia, who has urged improvement in consultations between members of the British Commonwealth of Nations; (right) Canberra, Australia's political capital: a city of design and beauty

There is no question about Australia's thankfulness to the U.S.A. for the major part she played in holding off and finally pushing back the Japanese menace. Without that aid Australia would have been lost, at least temporarily, to the Allies and the Dominion would have suffered the indignities and brutalities of enemy occupation.

American aid had come after the fall of Singapore. That fact is important. America filled the defensive gap made by British occupation in Europe, British losses and, some alleged, British inefficiency. In certain quarters there was bound to be a temporary change of emotional allegiance.

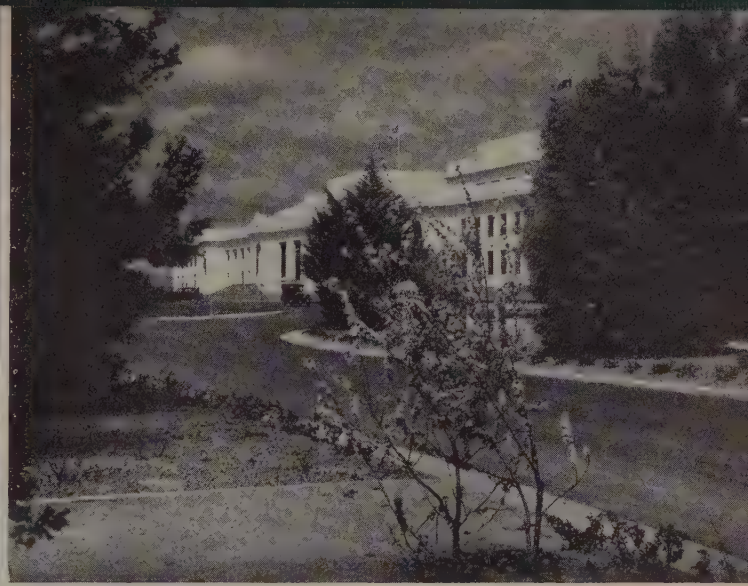
In short, a situation had been created which demanded careful handling, if the U.S.A. was thinking in terms of greater collaboration with Australia in post-war years. One-sided talk by irresponsible people would do considerable damage. Furthermore, Australians have no thought of attaching themselves in any sovereign sense to the American Federation: their British connections, despite Singapore, are too deep and their attachment to the autonomy of Dominion status is too profound to allow that, even as a passing consideration.

Take the proposals put forward by Mr Curtin on closer British Commonwealth collaboration. Although this is essentially a matter between Australia, Britain and other members of the Commonwealth, it throws some light on relations with the U.S.A. If there ever was a strained feeling between Britain and Australia, these proposals suggest that that period is past. They also show that Australia has no intention of throwing herself into the arms of the U.S.A., becoming the 49th State. It does not, of course, mean that

Australia is ungrateful for American aid or that there will not be even more cordial relations than those existing at present. It simply indicates the broad outlines of policy—that Australia intends to enjoy her position as an equal in the British Commonwealth and that she still appreciates the cold fact that Britain provides her biggest overseas market.

The Australia-New Zealand Agreement is also interesting in this respect. American interest in the south-west Pacific area is readily acknowledged, in fact welcomed. The United States is one of the Governments which the Agreement suggests should be represented on the South Seas Regional Commission which it is proposed should be set up to care for the welfare and advancement of Pacific Islanders. Her interests in the defence of that area are also recognized. Discussions, the Agreement suggests, should take place on problems of security between certain Governments of which the U.S.A. is one.

But any hint of domination of the Australia-New Zealand area by any other power is vigorously resented. The Agreement makes that obvious. "The two Governments [Australia and New Zealand] accept as a recognized principle of international practice that the construction and use in time of war by any power of naval, military or air installations in any territory under the sovereignty or control of another power, does not in itself afford any basis for territorial claims or rights of sovereignty or control after the conclusion of hostilities" (clause 16). And clause 27 says there should be no change in the sovereignty or control of Pacific Islands,



Photographs by courtesy of The Australian News and Information Bureau, London

except with the agreement of Australia and New Zealand.

* * *

Despite this new and more independent activity within a specified area of the Pacific, and granting the interest in world security—which Australia, of geographical necessity, always encouraged—has there been a change of attitude towards the wider Pacific, to the Far East? Do the new measures of the Pact, coming in the midst of a war with Japan, mean only a slight adjustment to Pacific affairs, an adjustment essentially defensive, based on the particular experiences of this war? Or will Australia in the post-war years think in terms of a better understanding and freer trade with China, India, the U.S.A., the Netherlands East Indies—and Japan?

Those who expect a change in the application of Australia's immigration policy to Asiatic people will be disappointed. There is certainly a desire for increased population; but there are no signs that the 'White Australia' policy will be altered.

That she has taken defensive measures, and that the defensive arc of islands is to the north and north-east of Australia, is understandable. No known enemy will come directly from the south, east or west. Nor is it strange that Australia is thinking in terms of defence, even at this moment: other Allied nations are doing the same. Furthermore, the Agreement does speak of this arc of islands as a regional system "within the framework of a general system of world security", in keeping with the international organization envisaged in the Moscow Declaration of October 1943.

While the question whether Australia will

make this a protective screen to shut her off from the Pacific, can only be fully answered by events, the answer is fairly obvious. Most of Australia's trade will continue to be with Britain—for many years at any rate. Her cultural ties are as strong now as in the past, and they will continue so. But the days of utter dependence have gone. It is significant that it is a Labour Government, once inclined to isolationism and always opposed to imperialism, that is asking for better collaboration between members of the British Commonwealth. However, while trade with Britain is not likely to decrease, trade and understanding with other countries, particularly those around the Pacific, is likely to increase. The arc of islands to the north and north-east may be thought of as a defensive line, but Australia does not intend hiding behind that barrier with New Zealand as her sole companion. The defence, while primarily Australia's and New Zealand's, is to be a cooperative effort; not embracing all Pacific countries, it is true, but certainly with the aid of Britain, the U.S.A. and others. Contacts, even if only in the name of defence, are therefore inevitable.

But there are others, and they have increased during the past few years. Recent collaboration with the U.S.A. is by no means the least. Then again, primary producers will continue to press for markets outside the British Empire. To that group there is every possibility another group will be added—the manufacturers whose industries have been greatly developed during the war. When the home market has been fully satisfied they will begin thinking in terms of world markets, in particular in the Far East.



The National Buildings Record

by J. D. U. WARD

This summary of the purpose and work of the National Buildings Record is followed by a selection of photographs, showing representative examples of our national architecture, most of which were included in the recent N.B.R. Exhibition of photographs and drawings at the National Gallery. On the left is a panel from the font at Tuddenham, Suffolk. The font, rather unusually, bears its date: 1443. This Lion of St Mark is a remarkably good example of 15th-century sculpture. Opposite is Ford's Hospital, Coventry—an almshouse founded in 1529 for aged widows—before and after it was blitzed

SECURED by their moat from the ravages of war which from time to time swept through the continent of Europe, the people of the British Isles accepted their rich heritage of architecture without thought: they "took it for granted". Thus, while nearly all the countries of Europe had recorded their architecture methodically, Britain had failed to do so: of Lübeck and Munich, as they were before devastation, there are proper records; of Bristol and Coventry there are not. Only when the *Luftwaffe* came across the moat was there any national awakening, and not until November 1940—when considerable damage had already been done—was a conference held at the Royal Institute of British Architects to discuss the surveying and recording of buildings. Thirty-three delegates from eighteen societies and public bodies attended to consult with the Minister of Works; a committee of four was appointed: Mr W. H. Ansell, President of the R.I.B.A., Sir Kenneth Clark, Director of the National Gallery, Mr Walter H. Godfrey, Chairman of the London Survey Committee and of the Architectural Graphic Records Committee, and Mr John E. M. Macgregor, Secretary of the Society for the Protection of Ancient Buildings. Lord Reith promised his full support, which included in effect a grant from the Treasury, and so, with Lord Greene,

Master of the Rolls, as chairman, the National Buildings Record came into being.

The directorate of the National Buildings Record was entrusted to Mr Godfrey, who had been chairman of the London Survey Committee for many years and had constantly urged the need for architectural recording on a national basis. Such recording as had already been accomplished had been piecemeal and uncoordinated. For example, the London Committee (founded in 1894) had covered certain areas such as Chelsea quite thoroughly. Inspired and encouraged by this London Committee, a Royal Commission on Historical Monuments was set up before the war of 1914-18. The phrase "historical monuments" was interpreted liberally to include houses and cottages, but the Commission, which made 1714 its latest date, had in thirty years been able to touch little more than the fringe, despite the fact that its aim was an inventory rather than a full, graphic survey. There were also, before the National Buildings Record was begun, a few recently-formed county records committees, such as those in Berkshire and Hampshire. The nucleus of existing records was not, then, nearly as large as might have been wished.

The programme before the N.B.R. was (a) to maintain a central index or register of



records of buildings; (b) to record war-damaged buildings; and (c) to record buildings before they were damaged. But damage was being done nearly every night; the raids of March 19 and April 16 and 19 were specially destructive, so the last of these projects was undertaken without delay, photographers were engaged and many new records were made in the metropolitan area. The L.C.C., the London Survey Committee and several volunteers helped. The listing of buildings throughout the country was facilitated by the Ministry of Works' appointment of some 328 panel architects to schedule buildings of merit within their regions and to report on damage. The N.B.R. itself prepared special lists for towns such as Bristol, Coventry, Birmingham, Hull, Southampton and Plymouth.

In tracing and indexing existing records the N.B.R. was greatly helped by the Courtauld Institute of Art, which deposited the Conway Library, containing over 100,000 photographs, with the N.B.R. and lent the services of their librarian. Indexing presents greater difficulties than the layman might think: the Conway Library was compiled on a date-and-materials basis, so that photographs of different parts of Westminster Abbey, for example, had to be sought in different sections from the 13th to the 18th century. But the N.B.R. and the Conway Library now file on a topographical plan: county by county, town by town, parish by parish, and building by building is the rule. In the course of indexing the existing records widespread inquiries were made and contact was established with many public and private collections. The basis of one central index was received from the Architectural Graphic Records Committee, which had prepared a card index, now placed at the disposal of the N.B.R., of about 50,000 drawings and engravings, and many officials and private persons helped to transcribe catalogues of local collections.

As a result of a visit by the Master of the Rolls to the U.S.A. the Rockefeller Foundation offered to bear the cost, up to £3500, of a staff of photographers on condition that they made records in the vulnerable areas during the following twelve months. Accordingly more detailed and systematic work was done at Newcastle, Liverpool, Leeds, Hull, Birmingham, Coventry, Norwich, Colchester, London, Bristol and along the coastal area from Dover to Plymouth. Exeter may provide an example of the work achieved: after one night raid, immediately light permitted, a N.B.R. photographer was at work, and went on taking photographs until the light failed. A few hours later the city was again

raided, and some of the photographed buildings were destroyed.

When in May 1942 the Germans made their 'Baedeker' raids, efforts were immediately switched to completing the records of cathedral cities and old county towns, with the aid of a special grant from the Pilgrim Trust. Some figures for one city, Canterbury, may be quoted from the second annual report of the N.B.R.:

Cathedral:

Photographs of fabric and fittings existing in the Conway (Courtauld) collection with chance acquisitions since 1941	485
Supplementary photographs of fabric taken by N.B.R.	149
Monuments taken by N.B.R.	130
City (including churches, almshouses, domestic buildings, streets, etc.) and photographs of bomb damage:	
Prints from local collections	122
Photographs specially taken by N.B.R.	372
	<u>1258</u>

Of Norwich, rich in fine architecture, nearly 1000 photographs were taken, and more than 800 were made of Bristol and Clifton. Later in the year there was a change in German bombing policy: small towns and villages and rural areas were attacked, and recorders were busied with making 150 photographs each of such places as King's Lynn, Rye and Bradford-on-Avon.

But anyone who thinks that buildings were photographed in detail merely that they might be rebuilt if destroyed, misunderstands the main purposes of the N.B.R. Begotten by the war, for a task made specially urgent by aerial bombardment, the N.B.R. is not just another temporary State scheme to be axed when peace returns. In certain places destroyed or damaged buildings may be reconstructed from records: there has, for example, been much discussion about some of Wren's London churches, and such a famous almshouse as Ford's Hospital, Coventry, which was very severely blasted rather than razed, might well be restored. But whether a destroyed building should be rebuilt or replaced by a wholly modern work must depend on circumstances and on how the people chiefly concerned feel about it. Was the old building fulfilling its purpose so well that improvement is impossible? What materials and what craftsmen are available? The very fact that the N.B.R. collects records of buildings which were deliberately demolished before the war, because there was no further use for them, is proof that rebuilding is not the first object of recording.

In many instances the chief use of building

records is to students of architecture—amateurs and lovers of architecture as well as practising architects and their pupils.

There is special need to record market halls and other buildings for which there may no longer be the functional demand there was. More than one good market hall has been demolished as an obstruction; there was once a scheme to destroy the famous market cross at Chichester, because it obstructed traffic; and such buildings as wind- and water-mills, tithe barns, dovecotes and granaries are all the time falling into ruin. Of course there is always the possibility of repair or restoration: for example, if England's economy were to become less centralized, the old need for market halls and water-mills (fitted with modern turbines) might revive, and such a scheme as Sir William Beveridge's, wiping out workhouses, might create a demand for more and better almshouses.

The task of the N.B.R., however, is not so much to determine whether or how records of buildings shall be used as to collect and collate the best possible records from an architectural point of view. It seeks to gather together and index records of all good buildings: with no date limit, and no exclusion of work because it is sacred or secular, too important or too trivial: great cathedrals and abbeys, parish churches and small chapels-of-ease, castles and cottages built of local materials such as cob or hard chalk relatively seldom used today—all are admitted to the files. Even the tiny parish prisons and old lock-ups which survive in many villages are considered of interest.

Of buildings which have long since disappeared there often survive paintings, old prints or even photographs. It is good also that people should be reminded how famous buildings have changed within the memory of living man: Mr Cecil Farthing, the Conway Librarian, produced interesting pictures showing how different was the appearance of, for instance, Shakespeare's birthplace, and Staple Inn, Holborn, less than a hundred years ago, and there is a particularly interesting trio of pictures illustrating Broughton Hall, Staffordshire, in three different centuries.

Among the best records are measured drawings, and some art schools are now encouraging their pupils to make them for the N.B.R. But often an 'ordinary' faithful drawing is valuable as a record: important structural

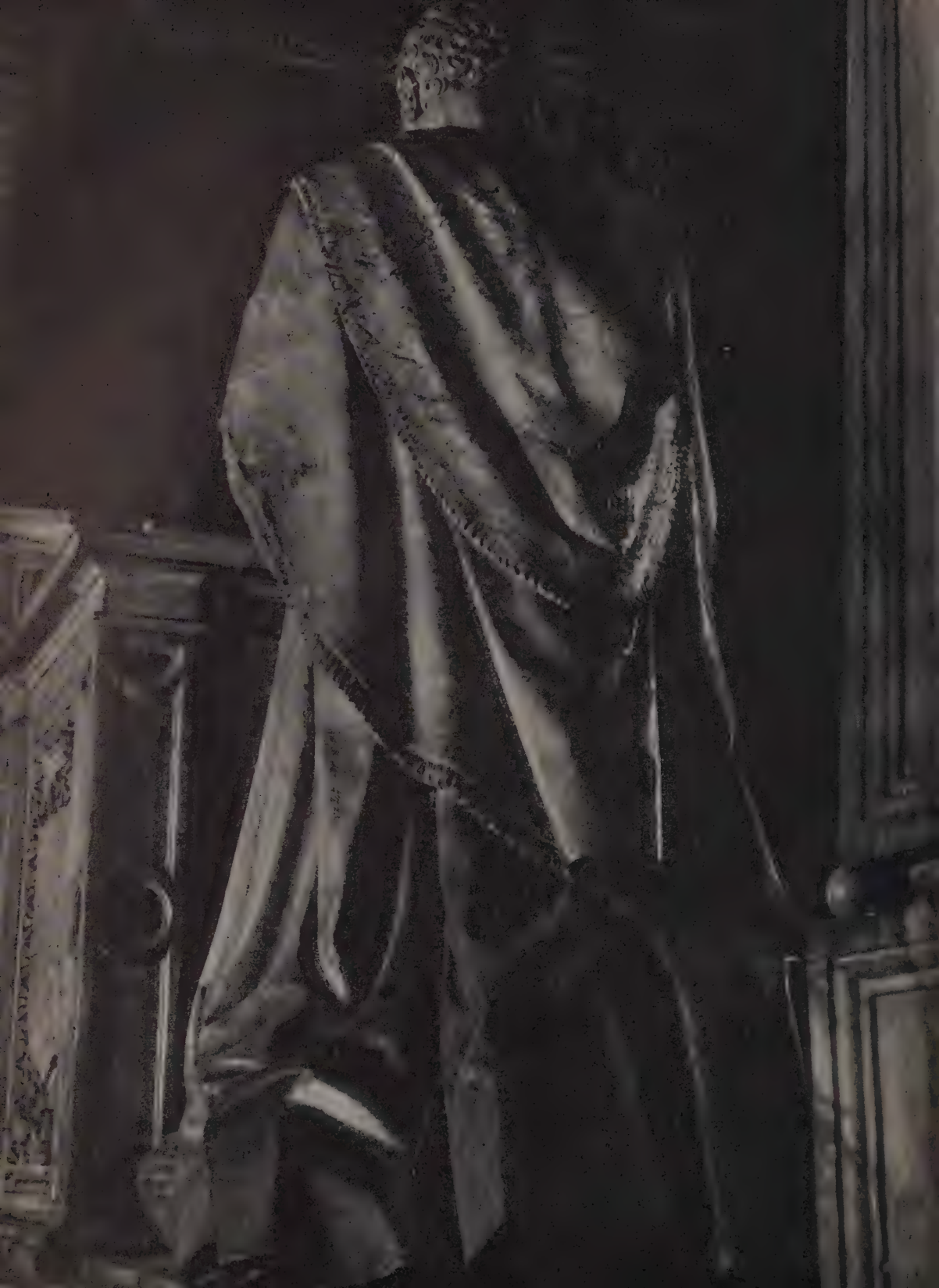
details which the camera might not emphasize will impress the trained eye of the artist. Yet, when all is said and done, the vast bulk of the recording work is by photography. Straightforward photographs, sharp and well-defined, are excellent: impressionist and pictorial photographs, such as those which show buildings through mist or at twilight, do not make good architectural records. In short, the recorder behind the camera should be a Canaletto rather than a Whistler.

The ordinary lover of architecture can help in this work of recording good buildings both from existing negatives (or prints) and by taking special photographs—for which priority materials can be obtained by approved helpers. Most of the southern and eastern and some midland counties now have their own photographic survey or architectural recording committee whose secretary will be eager to enlist help and to explain in what particular areas an amateur recorder can most usefully cooperate.



The 18th-century Hillman memorial in St James's Church, Hampstead Road, London, designed and executed by Coade and Sealy, who had patent stone works at Lambeth

N.B.R. photograph by E. J. Mason





N.B.R. photograph by Margaret Tomlinson

(Opposite) This photograph of the Dean Wotton monument, Trinity Chapel, Canterbury Cathedral, is one of a set taken before the air raid damage of 1942. The monument is considered to be one of the finest Renaissance examples in Britain. (Above) Detail from the monument to James Rudman in Exeter Cathedral. The work, probably by a local sculptor, well presents the graceful conventions of the Jane Austen period. (Right) Gilt bronze effigy of Henry III in Westminster Abbey (1291). The photograph is one of many detail pictures taken of the Abbey monuments after their removal to "a place of safety".



Warburg Institute photograph by H. Grunichin



E. R. Jarrett



E. R. Jarrett



E. R. Jarrett



In the City of London: church exteriors: (top left) Christ Church, Newgate Street, had among its riches two pulpits—an unusual distinction; (centre) St Bride's, Fleet Street, whose 226-foot steeple, the highest in London, was described by W. E. Henley as "A madrigal in stone"; (right) St Mary-le-Bow. The 11th-century crypt, having survived the great fire of 1666 which destroyed the original church, ranks as the oldest parochial building in London. All three are Wren churches and all have been seriously damaged. (Left) The cloisters and Deanery of Westminster Abbey which have been burnt as a result of raids. (Opposite) Where pigeons and starlings roost: Wren's superb details at St Paul's Cathedral, from an angle at which relatively few human eyes can appreciate them





John H. Stone

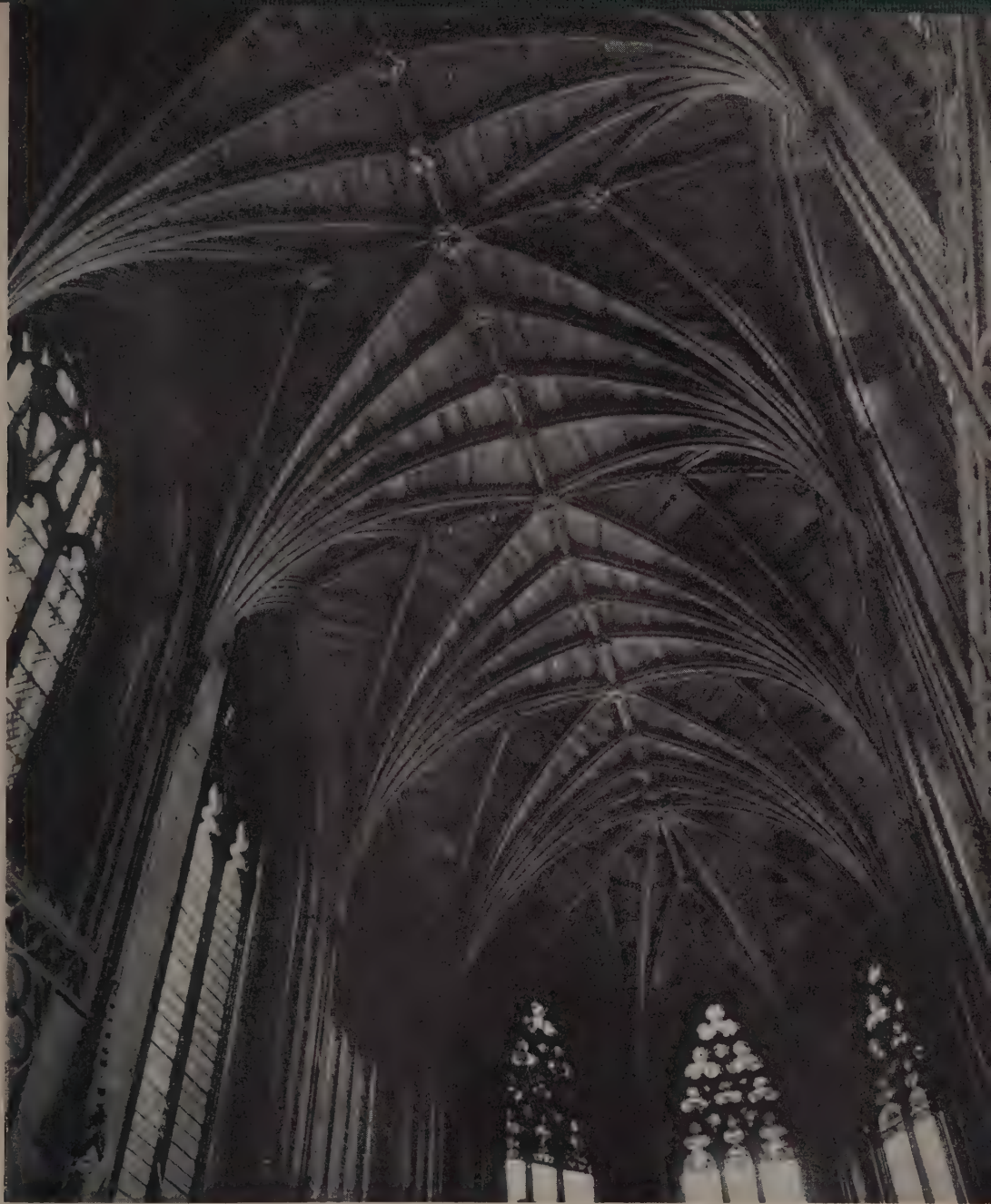


Rischgitz Studio



John H. Stone

City of London church interiors (left) St Bartholomew the Great, founded in 1123; such Norman work is rare in London; (top) St Lawrence Jewry, perhaps the richest within of all the rich Wren churches; (above) Dr. Johnson's pew in St Clement Dane's; the body



N.B.R. photograph by G. B. Mason

of the church was by Wren, but the steeple was by Gibbs—architect of *St Mary-le-Strand* and *St Martin-in-the-Fields*. (Above) *Lichfield Cathedral*, of which substantial photographic records have been made in the past. The *National Buildings Record* has undertaken the coordination of existing material before photographing buildings not already recorded. Supplementary surveys include exposures of post-Reformation monuments hitherto rarely photographed



*N.B.R. photograph by H. Felton
N.B.R. photograph by J. Yerbury*



J. D. U. Ward



(Top, left) St Mary's, Turville, a characteristic 13th-century Buckinghamshire village church; (left) interior of the church in the village of Farley Chamberlayne, Hampshire. (Above) The great Cistercian tithe barn at Great Coxwell, Berkshire; perhaps the finest in all England. Built more than 600 years ago, it is 152 feet long by 40 feet broad, and has walls four feet thick. (Opposite) How the appearance of a house may change: an interesting reversal of the usual practice, in which timbered houses meant to be plaster all over have been stripped to reveal their timber. Here an Elizabethan house, Broughton Hall, Staffordshire, whose elaborate timbering was open in 1686 (left) has since been plastered (right). (Bottom) Cottages at Finchingfield, Essex. The eastern counties can boast some of the most attractive vernacular buildings in England. Cottages such as this are well worthy of a place in National Records



W. H. P. P. P.



Country Life





Country Life
Warburg Institute photograph by O. Fein





N.B.R. photograph by S. W. Newbery

(Opposite, top) North side of Canons Square, Ilminster; early 19th-century town-planning displaying the grace and order that preceded Victorian speculative building; (bottom) fireplace in the Etruscan room, 20 Portico Square, London, designed by Robert Adam in 1772. (Above) 37 Portland Place. This Adam house—one of London's principal Jacobite facades—was built in 1774 and destroyed by a high explosive bomb in 1941. For two years after the destruction of the house the facade stood alone, but it became dangerous and has now been almost entirely demolished

A Prisoner's Birds

by JOHN BUXTON



WHILE we stood in the snow, waiting to climb aboard the seaplanes, a few swallows were flitting about the edge of the water, and oyster-catchers scurried among the stranded ice-floes, with head bent down but one red eye always warily watchful. Kittiwakes were crying despondently as they had cried at midnight when we landed a few days before; and a big hulking Herring Gull drifted slowly by, its yellow eyes glaring at us. We climbed aboard, and the pilot gave us a few biscuits. The engines whirled up to a wild screaming din, then settled down to their task, and we began nosing our way out among the floes into the fjord.

After a few days in Trondheim we were driven by car out to Vaernes, the aerodrome at the inner end of the fjord. In the water as we passed eider drakes and ducks were paddling out from the shore, and the kittiwakes flew along, buoyant and aimless, it seemed, as thistledown. Some finches pecked among the horse droppings on the road, and now and then a tiny bustling tit flipped out from the trees, and in again.

At Vaernes little was to be seen above the high palisade about our compound, but a chiffchaff sang persistently in some small birches just outside the entrance. I never saw it—I could see only the very tops of these trees, and the tops of some of the mountains in the distance—but it cheered me to hear its song, and to know that its life was not at all disturbed. I could imagine the wind-flowers and the *blåveis* under the trees, and the grey-green reindeer-moss like a dry and

powdery sponge, the small shiny whimberry leaves, the Camberwell Beauties with deep purple wings like splendid cloaks, edged with lilac, flying along the borders of the forest. All this, and so much else, would be there still, and the wild earth was indifferent though many a town and village and farm should be burnt, as I had seen, and though many men should be killed.

The space of earth that I could see was very small, but there was plenty of sky, and here on many days a pair of whimbrel chased each other in flickering flight, crying the wild teetering cry by which they are known. One evening a skein of about twenty geese flew over, high to the west, and a few minutes earlier I had seen some scaup flying to the east. Other birds passed briefly across my bit of sky, oyster-catchers, redshanks, once a merganser, swallows, and the first house martins of the year. After a day or two a willow wren joined the chiffchaff in singing near, "a fairy-like child with an exquisitely pure, bright, spiritual voice laughingly speaking in some green place". A pair of starlings began to nest in the eaves of one of our huts; and on the roof a pair of white wagtails ran about, one with its tail cocked up while the other's was depressed onto the wooded tiles. A single magpie used to come to a puddle to drink, always alone, to my regret, for I had known the rhyme so long: "One for sorrow, two for mirth . . ." But a second never came.

Before going to Oslo we spent a few days by the fort at Trondheim, and there I could see all round. A whitethroat sang in some bushes close by us, cascading up into the air now and again. Swifts came, for it was now June; and a yellowhammer was building her nest not far away, while the cock sang his sultry song on a fence.

On the way to Oslo we passed through the great Dovrefjell bog, Fokstumyren, where two years before I had spent many days alone walking on mountain and moor, getting soaked in the sleet while I watched the first shore-larks I had seen, or sinking thigh-deep among the niggerheads in trying to come near a pair of velvet scoters on a tarn. Now from the window of the train I saw a crane stalking through the willow scrub, and that was all.

In Oslo a pair of great tits had two chicks

in a hole in the fork of a pear tree in a small orchard where we could walk and sit. There, for the first time, were a few wild flowers, and best of these a bank of greater celandine whose evil-looking yellow sap makes it seem less strange that it should be a poppy.

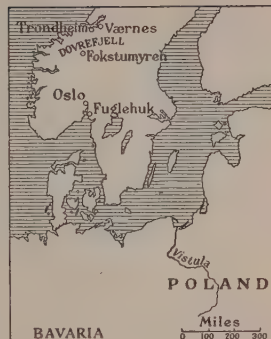
On the passage from Oslo to Denmark we were not allowed on deck till we were past Fuglehuuk, clear of the narrow waters of the fjord, and if there were any birds but gulls I have forgotten. Somewhere in the south of Denmark I saw the first wild stork I had ever seen, daintily stepping about a small green field by the embankment of the railway. But in Poland, where we spent a fortnight, many were to be seen every day, soaring to great heights in wide spirals over the Vistula. On the way there I saw storks at their roof-top nests, and also another bird I had never seen wild before, a nutcracker, a handsome speckled jay-like bird that occasionally visits Britain.

I must have missed many birds in Poland through my lack of field-glasses, and through my ignorance of some of the smaller birds likely to be seen there. But the golden oriole's flute-like call, so clear, cool and pure, and the splendid pattern of chestnut and grey, black and white in the plumage of the woodchat shrike left no doubt about these two species. Yet there was much joy in finding here birds known well as long as I could remember: chaffinch and house sparrow, magpie (more than one now), swallow, house martin, swift, cuckoo, kestrel and turtle-dove. Still singing were yellow-hammers, redstarts, chiffchaffs, willow wrens and some other warblers I did not know. Best of all, larks danced up high above the level country and poured down their gay song like rain glittering in sunlight. These and the lapwings, flying with strong, deliberate beats of their broad wings, and crying their harsh sweet cry, brought most nostalgia: the two birds I had loved best and known longest in the fields and moorlands of Cheshire. A pair of wheatears were feeding their chicks in a hole in the rampart of the fort, birds I had first known on the Malvern Hills, but since, they had many times been a delight to see, whether running about seaside grass, stopping to look round them on every small tump or tussock, or dancing lightly up into the air to sing their pebbly song by a Norwegian beck.

But it was not in these birds, too much associated with other places, that I found most delight in prison. Such associations make only for sentimentality; and the true joy of watching and listening to birds is in

the immediate awareness of the moment, in the insight gained into the way of life of *this* individual bird. Afterwards these impressions, if noted at the time, can be compared with other notes, but when near a bird it is better to forget ever having seen any of its

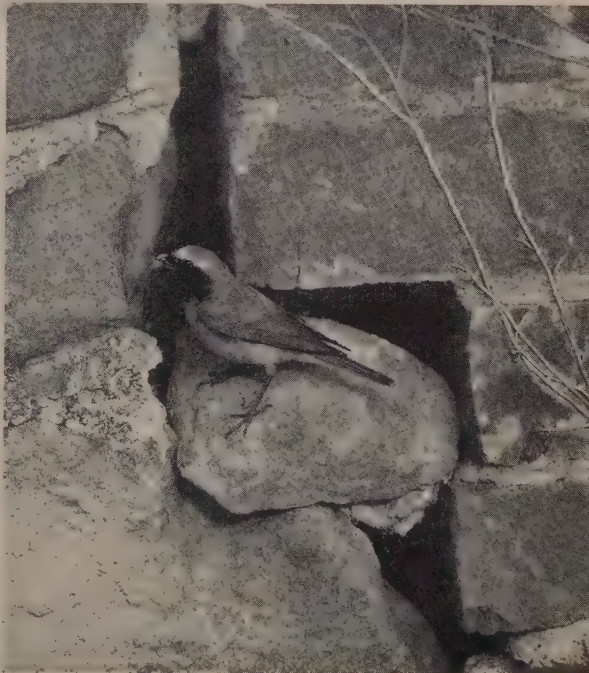
species before, to make the mind as far as possible a waxen tablet, capable of receiving and retaining any and every impression. The more birds known, the more the individuality of each is realized, and the great delight of studying them, as of any living thing, is not in the confirming of old opinions or prejudices but in the discovery of new things. So it is that the best memories of birds are not general but particular, memories perhaps of an oyster-catcher rather petu-



Stanford, London

(Opposite) *Herring gull calling.* (Below) *Cock redstart at the entrance to its nesting hole*

Photographs by Eric J. Hosking



lantly chasing her nervous and incompetent mate back onto the nest, that she might preen and sleep; of a bluethroat suddenly flying up onto a twig to repeat the bell-like song that a moment before we had said surely could not be a bird's; of a snipe flinging itself down hundreds of feet through the air, then braking so quickly that it could alight most daintily among the mereside reeds. Such remembered instants are countless, and can be added to in prison, though it is more difficult in prison to dissociate the mind from all previous knowledge when watching a bird that is too intimately a part of the English countryside.

During those first months in Bavaria we were too crowded on the ground for many birds to venture among us. Besides, we were too near starving to have the alertness of eye and ear that is a first necessity for the enjoyment of birds. Yet even in those days some hours are worth remembering. There were the redstarts feeding their chicks on the barbed wire and in the cherry trees, tame as the English robins whose place they took in the society of birds. There were the wild flights of the swifts round and round the narrow courtyard, their screaming cries as they raced about in small parties above the river, and their flying away in the dusk up into the pale sky where, perhaps, they would sleep. A willow wren on its way south stopped now and then to feed, and while it fed sang a few times; and the chiffchaff was about, uttering its cheerful monotone till late in October. Once, on September 2, two green sandpipers flew high over and called, and soon flew away towards the mountains. But on two days in September, the 8th and 11th, there were those spectacular rushes which so many people expect of migrating birds and so seldom happen. Then the swallows, house martins and sand martins, must have been held up by a dam of bad weather, and they kept on flying in throughout the day, huddling together on wires so thickly that often I saw one perched on another's back, both fast asleep. These were days of driving rain, and the passage of the mountains must have been impossible to the birds. So they drifted against the weather like snow against a wall, waiting till they might pass on. In 1941 there were no such rushes, for the weather never held the birds up long enough for the small migrating parties to collect into great flocks.

Before the last chiffchaff had gone a dipper came to the creek, and remained there till February 24, when I suppose the mountain stream where it bred was free of ice again.

It was easy to watch it under water, with a film of air about its body, thrusting along with its wings on the bed of the creek; and before it left it had begun to sing, rather surprisingly, since it did not breed near. A few days later four dabchick came to the same creek. They too stayed all winter, and the last did not leave till it had its full breeding plumage at the end of March. Occasionally a gull would fly leisurely to the south over the river, and in mid-winter black-headed gulls were often to be seen. Coot and moorhen visited the creek for a few days at the turn of the year; and one day a goosander was diving in the river for some time, perhaps the least expected of the seventy odd species we saw, though some breed on the Danube. The only other duck we saw were mallard and teal, which, with an occasional pheasant, made the sportsmen among us suddenly aware of the presence of birds.

With the approach of spring I decided that the bird most profitable for study, of the few nesting in our area, would be the redstart; but of the hundreds of pages of notes on the three pairs that bred I cannot here give any summary. The redstarts, indeed, need a book to themselves: intensive study in 1943 brought my notes up to two and a quarter million words—now being slowly sorted.

First of the summer birds to return was a single swallow on March 24. Two days later there were four, and the first chiffchaff had come. After that for six weeks the spring migrants steadily passed through. On April 10 and 11, days of snow and frost, there was a big gathering of birds about the creek, the only place for insects. Ring ouzels, song thrushes and a missel thrush were there with the blackbirds; the first redstarts came, and a robin crept about the bushes. A pair of whinchats stayed an hour or two on the stone revetment of the river, and a pair of meadow pipits ran about the muddy edge of the creek: neither of these birds was seen at any other time. The late fall of snow had caught birds that had already returned to their breeding-places and had driven them to the nearest supply of food. No doubt they and many others would have been seen if we could have taken a short walk, but we had to wait for the birds to visit us, and could never search for them.

The only rush of migrants was on the morning of May 8 when hundreds of swifts flew over to the north. For the rest of the spring the birds filtered through in small parties, a few staying to colonize the district while the rest went on.

Dawn song was full but less varied than in most parts of England, for missel thrush and song thrush, robin and dunnock and wren were all absent, and though black-cap and white-throat were present for a time, the only warblers regularly in song were chiffchaff and willow wren. No swallows or martins nested on our buildings, and the scream of the swift has less claim to be called song than their musical twittering. Always, so far as I

could tell, the blackbirds began the chorus, and by April 10 as early as ten minutes to six, more than an hour earlier than the first song a month before.

Some nest-boxes were put up on trees in a small wood, and nearly all were used by great tits and blue tits; in one, as I had hoped, a pair of redstarts raised a brood. Chaffinches nested in the birches, white wagtails on the buildings, very many swifts and a few sparrows under the eaves. A pair of tree-creepers busily gathered fluff from the bark of willow-trees for their nest in the eaves of a timber shed, and later gathered food for their chicks in the same place. One day I picked up a young goldfinch, but though it showed no external damage it soon died. In the late summer young swifts came into many of the rooms at all hours of the day, and rested on floor or sill. One was picked up and held on the open hand where it rested for two hours before flying off. Such patience have prisoners!

Other birds nested not far out of sight and collected food inside our wire. A black redstart may have nested, but we never saw a hen. The lonely cock sang almost all day in summer, and again, after a break for the moult, in autumn, on the roof of the clock tower. The striking of the clock sent it away in great alarm, which is not to be wondered at, for it sang often within a few feet of the bell. The song is a strange one, made up of two musical phrases not unlike the common redstart's, with a scratchy whirring phrase in between, like the winding-up of a very rusty toy. This noise was never produced



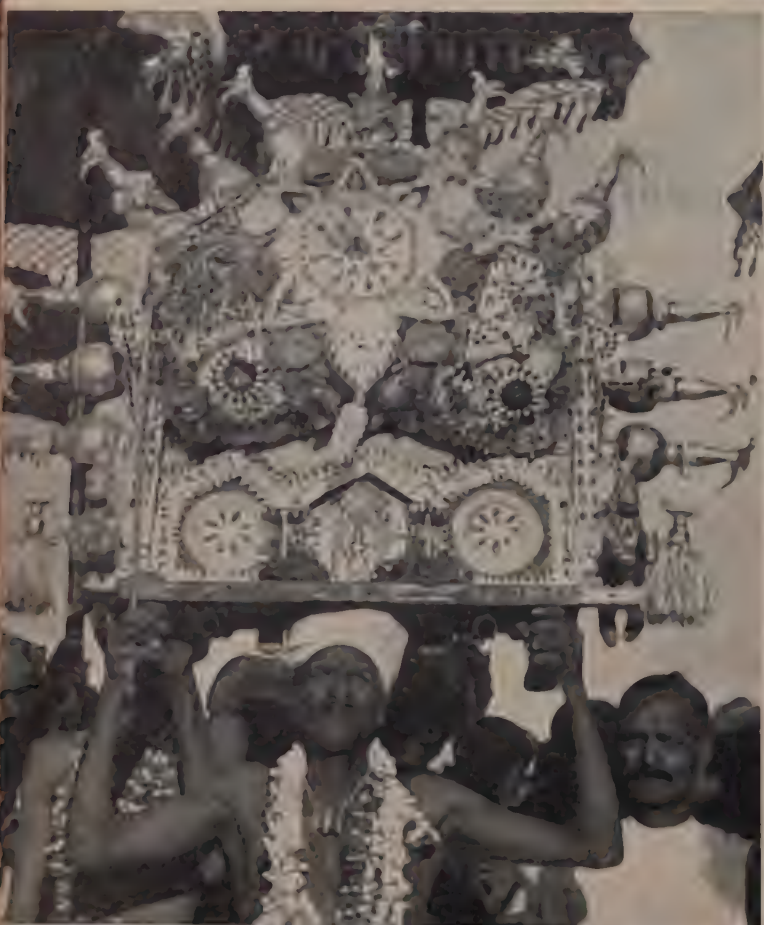
British Red Cross Society

British prisoners in a German prison camp in Poland

except between the two musical phrases, though one phrase would often be given alone, with the beak held wide open. The black redstart sang until October, as it had the year before.

I have already said that there were no rushes in the autumn migration in 1941, and perhaps fewer species were seen than in 1940. But on October 8 seven geese flew steadily over to the south at dusk, probably white-fronts, but they were too high to be determined, as geese so often are. They were quite silent.

Lord Grey, to whom the study of birds was especially a solace, said: "It is just because this wild life is amoral, not troubled by questions of right and wrong, that we find it so refreshing and restful". To a prisoner this is probably the most important aspect. But there are others. It is good, surely, to learn of the life of other creatures than man, not only as consolation, nor for the sake of any moral we can draw from what we learn. We can find refreshment and delight in the world of birds, and it seems to me that man lives his life best and most fully only when he recognizes that he is a member of a community greater than any city or nation or race. For me many of the best moments in life have been spent in wild places watching birds. And so, in prison, birds were among my chief delights. It was consolation to see them indifferent to us, indifferent to war. And to enter into their world, however briefly and imperfectly, was for the time to find longed-for privacy and seclusion that else was scarcely to be had, and to share something of their joyousness and freedom.



An Indian Village Festival

Notes & Photographs

by LIBRA

Once a year many Indian villages hold a festival in honour of their particular goddess. On a day fixed by the village sooth-sayer the people assemble at the village temple, and form a procession led by big drums, and youths clad in yellow, garlanded with flowers, their bodies painted



in curious spangled patterns, bearing yak-hair fans on their shoulders, and carrying tall silken umbrellas. An elaborate metal image of the goddess is carried by the chief priest, who, at the end of the day, bears it back to the temple, and falls in a trance. "The Goddess has come to him" the villagers cry, and offerings of camphor fire, cocoanuts and plantains are laid at his feet. In a voice of thunder he cries "You have done well this time, my children. You will be happy and your village will be free of misfortune this year." "The Goddess has spoken", the people cry. "She is pleased. The Mahatayi (Great Mother) will always protect us."





(Above) Village women with burning torches assembled near the temple. In their mouths are what are called locally - 'mouth-locks': rectangular frames of silver wire which pierce both jaws and remain in place until the festival is over. (Left) The village headman. (Opposite) This god, made of earthenware by the village craftsmen, is the husband of the goddess in whose honour the festival is held





(Top) One of the characters in the festival is this wandering mendicant, with his necklace of black beads, gong, and trumpet. (Left) A villager carrying his offering of a coconut and flowers. (Right) Other characters are these two devil-dancers, grotesquely dressed, who sing and dance. The final ceremony is the walking of a trench, filled with live embers. After all have taken their turn and gone through the fire, they return home, satisfied that no harm can come to them or to their village for another year



Photographs from the Ministry of Information

Aegean Raiders

In July of this year patrols of combined British and Greek troops, specially trained for the purpose, made a series of raids on enemy-held islands in the Aegean. These photographs tell the story of one of these raids on the island of Symi. In twenty-four hours the raiders 'liquidated' the entire German garrison. Above is a photograph giving a general view of Symi harbour taken from the captured German H.Q. in the Castle of the Knights Hospitallers in the centre of the town of Symi

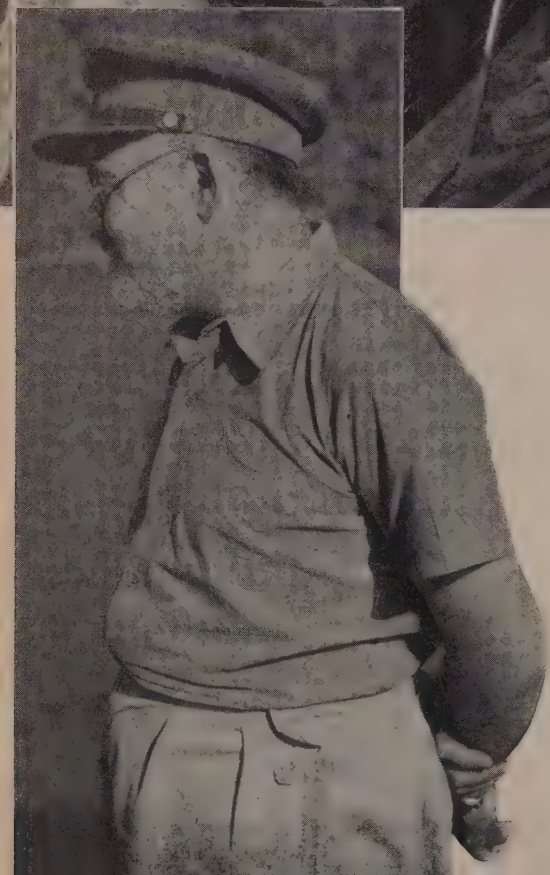
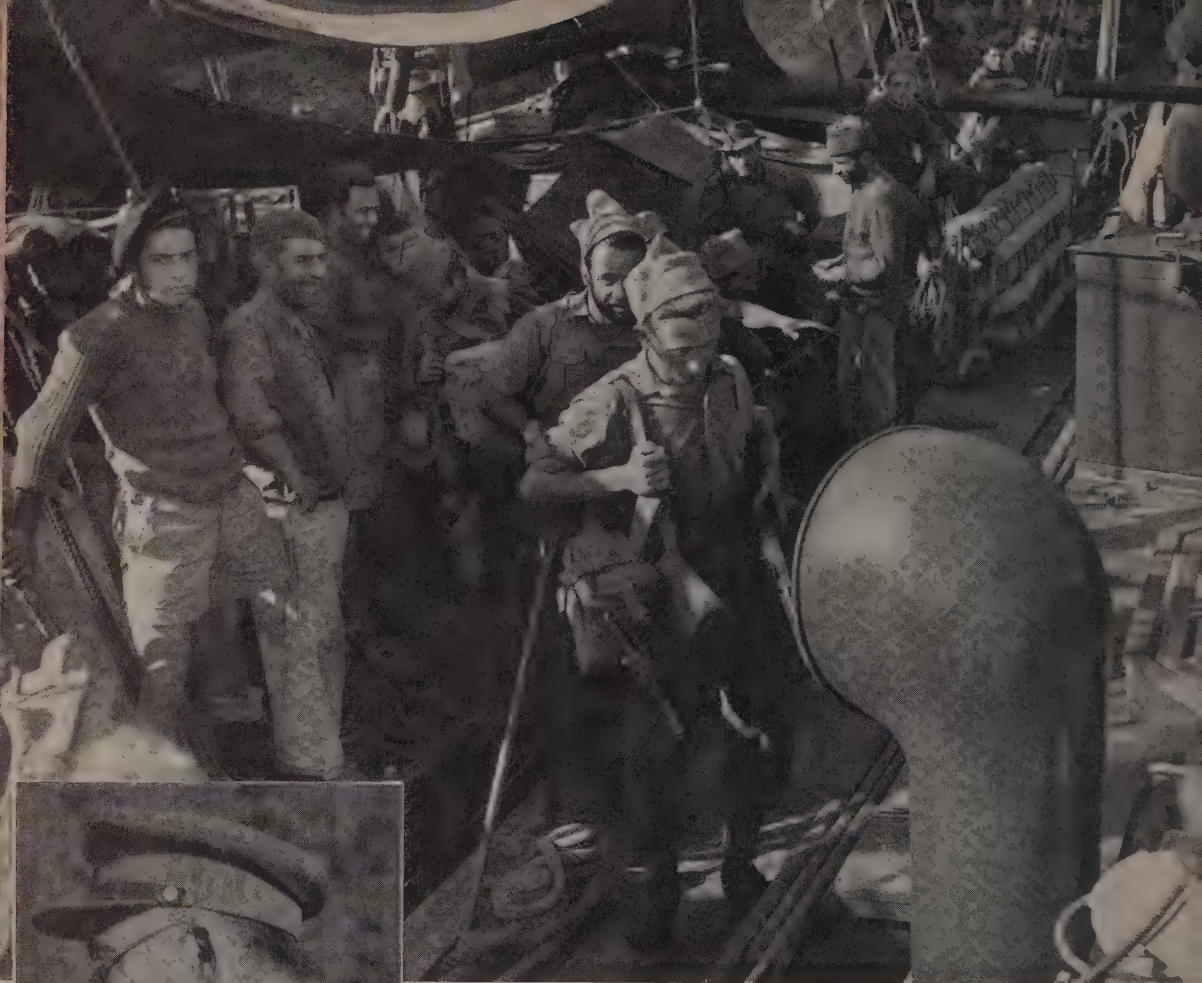


Stanford, London

(Right) Some of the British officers laying their plans for a raid on military objectives. (Below) Packing a haversack with food and explosives before starting off. (Opposite) The objective, Symi harbour, and the patrol loading stores and equipment on the caique in which they will embark







(Above) Greek troops, complete with kit and equipment, which includes large quantities of explosives, boarding their motor launch. (Left) Colonel of the Greek forces watching the embarkation



(Above) Clouds of smoke rising from the ship-building yard at Symi after the raid; it was set on fire and totally wrecked. (Right) German prisoners, captured by Greek troops, transfer from an enemy caique to an Allied launch





(Top) While on the island of Symi the raiders kept in touch with their H.Q. by radio; wireless operators set up a station under cover of rocks. (Above) Keeping a watch. (Right) In high spirit as everything goes "according to plan"

(Right) On the quayside at Symi after the raid was completed. Note the 'M' Craft captured from the Germans. (Below) Raiders returning along the quay at Symi to re-embark

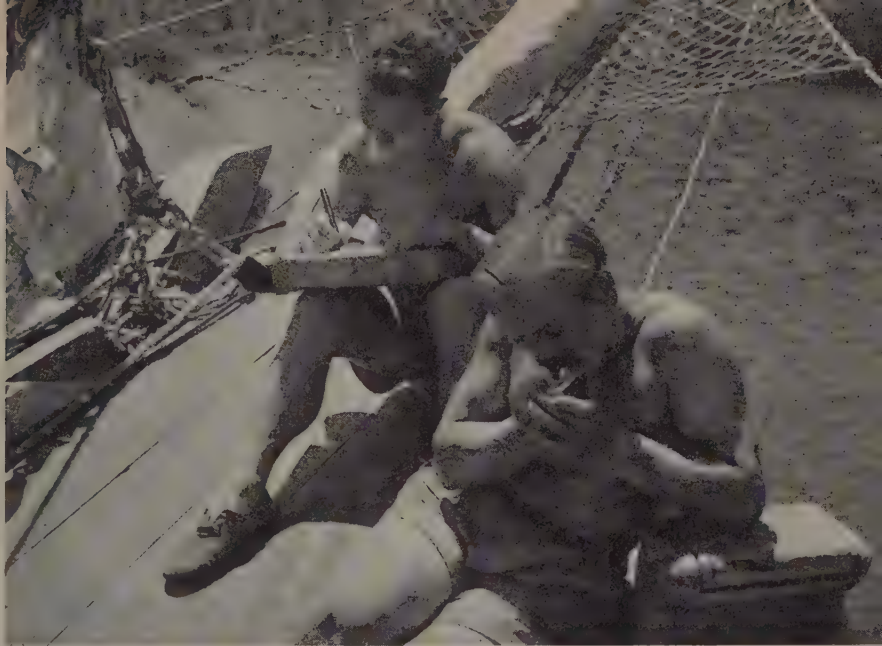




(Left) A R.E. sergeant sees the effect of dynamite on a German 20 mm. gun position. (Below) An American serving with the R.A.M.C. gives first-aid to a British corporal



(Right) *Between raids relaxation: on the deck of the base ship and (below) in the mess, where the ship's cat 'Wolf' holds court*



The Megaliths

by ESTYN EVANS



ANYONE who has seen Stonehenge, on Salisbury Plain, or has marvelled at the mysterious carvings in the vaulted chamber of New Grange on the Boyne must have asked himself: who built these great stone monuments, how were they erected, to what period or periods do they belong, what was their purpose, and what sort of civilization do they represent?

For over a century archaeologists in many parts of Europe have addressed themselves to these problems. The accumulated results are assuming a bewildering complexity, and such an array of scientific terms and systems of classification has arisen that those who are not specialists may well ask for a simple exposition of the megalithic question.

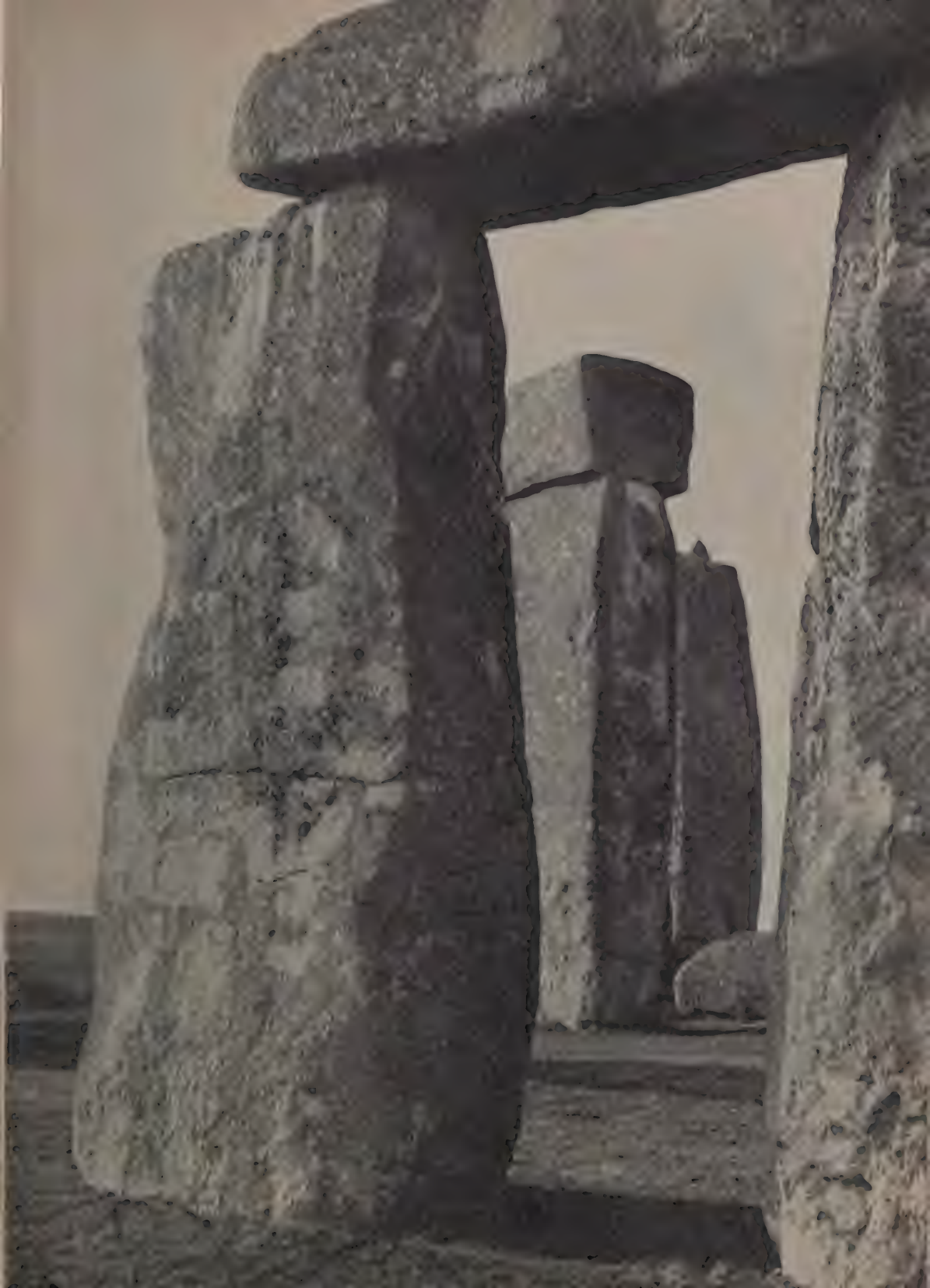
From the nature of the problem this is hardly possible without some sacrifice of truth, but fortunately there is, to begin with, a purely geographical aspect about which there can be little argument. Where do we find the megaliths, and what is the significance of their distribution?

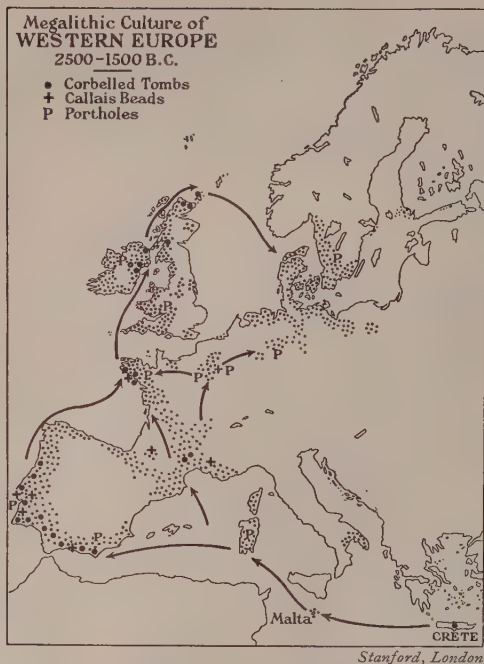
It is well known that the erection of rude stone monuments has characterized several areas in western and southern Asia at some period or periods—for example Syria, Palestine, parts of the Indian Deccan and French Indo-China—and certain writers have used this as evidence for the wanderings of Children of the Sun who are supposed to

have carried ancient Egyptian civilization eastwards by way of the Monsoon Lands to the Pacific and even to Central America. We need not follow them in that direction, but turn our eyes more profitably westwards to Europe. Here we find the megaliths in their thousands, despite the ravages of time and the demolitions of later ages—memorials of an early civilization surviving because of their massive strength and, in some parts, by virtue of the superstitious dread in which they have been held through countless generations. Today, pillage and destruction are no longer tolerated in civilized lands, and the megaliths are protected by law in nearly all countries.

They occur most abundantly in the peninsulas and islands of western Europe, from the western Mediterranean region to the lands of the west Baltic. In Scotland their grey stones rise from the misty shores of the Atlantic; in Sardinia or south Spain they look out over the sunny Mediterranean; in Danish Zealand, where 3000 are said to have been counted, they endure the rigours of the colder

(Opposite and above) Stonehenge, the most famous of all megalithic monuments and the most remarkable survival from prehistoric times to be seen in western Europe. The great sarsen uprights have their cross-slabs secured by mortices. They probably date from about 1600 B.C.





Baltic climate; but it is this maritime distribution that provides the clue to their dispersal and gives them a fundamental place in the story of Europe of the Sea. For although it used to be claimed, in days when archaeology as well as history was conceived along nationalist lines, that megalithic architecture was a spontaneous and independent development in each country, the detailed resemblances between different provinces—in styles of construction, associated cultural finds and chronology—are such as to force modern archaeologists to seek an explanation in the theory of culture-diffusion. And while some German scholars, accepting this view, have perversely interpreted this diffusion as having its *source* in the west Baltic lands, it is now generally accepted that the origin of the megalithic civilization, so far as western Europe is concerned, must be sought in the lands of the western Mediterranean.

As to chronology, while certain styles of megalithic architecture, such as stone circles, continued to be erected through the Bronze Age, and individual monuments may have been built, or re-built, in the early Iron Age, the great period of the culture was the end of the Neolithic Age and the dawn of the Metal Age. In southern Iberia the finest tombs frequently contain metal objects, but with one or two exceptions no metal has been recovered from undisturbed deposits in the megaliths of

the British Isles, which are thus classed as Neolithic—the period of the earliest agriculture and herding, characterized by the polished stone axe. If we take 2500 for the beginnings in south Spain, and 1500 for the close of the megalithic age in Denmark, we have a period of ten centuries covering the primary phase of the great stone monuments of western Europe. It should be understood that this dating does not rest merely on the negative evidence of the general absence of metal, but on the sum-total of information derived from many sources.

There is still, however, considerable diversity of opinion as to the *methods* of megalithic diffusion. On the one hand we have the old theory of a megalithic race—the swarming of southern migrants who brought with them their methods of building and their patterns of thought. On the other hand are those who believe that the megalithic religion was imposed on the native peoples by a handful of zealots. The first view is no longer accepted: it runs counter to modern conceptions of diffusion, ignores the immense difficulties of early navigation in the Atlantic seas, and finds little support in anthropology. The second view is inadequate but probably comes nearer the truth. We should envisage, not indeed an inspired band of missionaries but many small, probably rival, groups of pioneering prospectors and their camp-followers opening up the sea-ways of the West. Dwellers along lonely coasts seem to have responded vigorously to the call of civilization: populations increased as never before and colonies of megalith-builders came to establish themselves in secondary areas of settlement inland or across further stretches of sea. There are good reasons for the increase of population: in the remote parts of north-western Europe the megalith-builders brought with them the first food-crops and domesticated animals, the bread and milk of life, while their religion, based on fertility cults, would doubtless have encouraged procreation as part of the ritual to ensure the desired increase from fields and livestock.

What we cannot conjecture is the impulse that brought the men of the megaliths to brave the Atlantic swell and the strange tidal waters of the narrow seas, and to settle in the cooler and wetter lands of the north-west. Was it also the result of pressure of population in the homeland, or was it a search for treasure, or some more mystic call? These are questions on which archaeologists have suspended judgment in the more profitable search for knowledge by means of excavation and comparative studies of tomb-morphology. Nor does the method of erection receive much

(Opposite) The small dots give the distribution of the megaliths. Special features indicating diffusion and trade are marked by symbols shown in the key. Arrows show the probable lines of dispersal.

(Right) Each dot on this map marks the site of a segmental gallery grave (horned cairn). Notice how they cling to the higher ground. The distribution of this 'Carlingford Culture'—so called from its main coastal focus and entry, Carlingford Lough—corresponds closely with the modern political area of Northern Ireland, whose boundary is marked



Stanford, London

attention nowadays, despite its obvious interest to the enquiring layman.

On the first point it is relevant to notice that the climate of northern Europe was much drier and less stormy in megalithic times than it has since become. The cyclonic régime we know so well was not fully established until the period, beginning about 500 B.C., which corresponds with the dawn of the Iron Age in these lands. At the time we are discussing, about 2000 B.C., Ireland, for instance, was so free of strong sea-winds that great trees grew down to the water's edge even along the exposed western coasts where today winds of gale force blow on the average one day in every ten. It is clear, further, that whether or no the prospectors were interested in copper or gold or pearls, the megalithic religion did demand a supply of precious stones and magic substances, and that the geological circumstances of western Europe provided a variety of materials for these purposes as well as many fine-grained igneous rocks suitable for grinding and polishing. It may well be that copper and gold were sought for. In Ireland, at any rate, these metals soon came to be worked and exported on a grand scale.

As to how the great stone blocks were handled and set up, one has only to watch a couple of Irish peasants moving boulders from their fields with crowbar and sledge to realize what can be done by strong arms and simple appliances. Single stones set on their edges as part of a chamber, or on end as standing stones (menhirs) call for less astonishment than the great capstones, weighing up to 100 tons, raised many feet above the ground. It is surmised that these were dragged up a specially-built ramp of consolidated earth which was later removed, the supporting side-

walls having been erected beforehand or else inserted after excavating the earth from beneath the capstone. A modern Indian method of transporting large stones is to lash them to an extensive trellis-work frame of bamboo rods, the weight being thus distributed to scores of human carriers.

There is less doubt as to the purpose of the megaliths: the great majority of them were communal tombs, receiving successive burials, generally by inhumation, though in certain areas, such as Brittany and Ireland, often by cremation, probably for many generations. Occasionally excavation has revealed that many bodies were deposited simultaneously. The popular belief that they were Giants' Graves is thus at least a half truth, but for all their size they were built by and for men no bigger than ourselves, on the average indeed rather smaller. It is much nearer the truth than the pernicious nonsense of 19th-century theorists about Druids' circles, astronomical observatories and sacrificial altars. The deplorable part of all this romantic druidic cult is that it led to the view that the megaliths were esoteric phenomena utterly divorced from ordinary human experience. It has been the task of the last half century to restore them to their rightful place in the evolutionary sequence of European culture, to see them as the enduring symbols of the early spread of the fundamental arts and crafts along the borders of the Atlantic. In this country it was Fergusson's book *Rude Stone Monuments* (1872) that, despite its erroneous chronological conclusions, set research on the right lines by asserting that the megaliths were "the works of a race of men actuated by the same motives and feelings as ourselves." There seems to be no more than a generic relationship between the megaliths and the

rock-cut tombs and pyramids of the Old Kingdom in Egypt: it is rather to Minoan Crete, the Aegean Islands and adjoining parts of Asia Minor that we must look for the sources of several culture-elements that were to be incorporated in the megalithic civilization of Iberia.

Although the famous Mycenaean *tholoi* are too late in date to be ancestral to the corbelled tombs of the west, the beehive style of vault was known at Mesara in Crete from the later part of the Early Minoan period. Several Aegean types of pottery and decorative techniques, as well as idols of the Mother Goddess, are also found in Spain, while the islands of Malta and Sardinia have respectively elaborate megalithic temples and rock-cut tombs which, although they do not supply the missing links between the Aegean and Spain, point unequivocally in both directions, east and west. For instance, many details of the Maltese constructions—the port-hole doorway, the semicircular forecourts, pecked and spirally-ornamented and cup-marked stones—are familiar in megalithic areas along the Atlantic seaboard, while discoveries made in them, such as pottery and idols, are clearly inspired by Aegean models.

It has been argued that the colonists who implanted the megalithic idea in Spain came by way of north Africa, as did the Carthaginians over 1000 years later. But most of the dolmens and stone circles of Algeria and Tunisia are much later in date: the earliest *datable* examples belong to the third century B.C., although it is admitted that some must be much older. At any rate all students agree that the megalithic cultures of southern Iberia were established by about 2500 B.C.: the earliest foci were in Almeria, Andalusia, Algarve and the Tagus estuary.

The best-known of all forms of stone tomb is the dolmen, that is a chamber formed of three or more uprights and roofed by one or more capstones. Many African and Asiatic dolmens can be shown to date from periods long after the heyday of the megaliths. Yet such structures, because of their simplicity, used to be regarded as the ancestral type of grave in all regions where they occur, for example in Spain, France, Britain, Ireland and the Baltic. So far as Europe is concerned, with the possible exception of Denmark, it now seems clear that the dolmen, instead of being the prototype of more elaborate tombs, really represents a stage in the decline of megalithic architecture. Moreover many so-called dolmens are but the last surviving relics of tombs that when first built were far more complex. The fact that so

many of them are free-standing, that is possess no covering cairn of stones or tumulus of earth, also points to destruction, for there is little doubt that all megalithic tombs in Europe were originally surrounded by if not always concealed in a mound. The theory of the simple free-standing dolmen as the ancestor of the whole complex family of megalithic graves is now discredited: it rested on a belief in progressive evolution and committed the typological error of mistaking the degraded for the primitive. One has only to think of the decline of other forms of religious architecture, such as the Egyptian pyramids, or the great Gothic cathedrals of the Paris Basin and their successors in many lands, to realize that deterioration has often accompanied the weakening of inspiration.

It is now generally held that the original tomb-form of Iberia was the dry-walled cupola-grave or corbelled vault, with or without entrance passage, imitating and contemporaneous with the subterranean tomb excavated in soft rock. On this view it was the conversion of the round chambered tomb from dry-stone construction into megalithic forms, whether resulting from lack of suitable stone slabs, or from declining skill in dry-stone building or more probably from some other cause, that gave rise to the first true megalithic grave, namely the passage tomb, a polygonal chamber approached by a passage and buried in a round cairn or tumulus. This is regarded as the primary megalithic style in Brittany as in western Britain and Ireland. Diffusion had begun, however, before the art of dry-stone building had been abandoned. Not only are some of the finest megaliths in Brittany, Ireland and Scotland roofed in the corbelled bee-hive style—for example, Ile Longue in the Morbihan, New Grange in Ireland and Maes Howe in Orkney—but there are a few completely dry-stone built cupola graves known from Ireland, for instance Slieve Gullion in County Armagh.

The majority of passage-tombs, however, are built of great stones and roofed with capstones. There are many variations of the theme: the ground plan of the chamber, for example, is frequently cruciform, and the round cairn may be surrounded by a circle of standing stones. But a large proportion of the megaliths of the British Isles can be derived typologically from the passage grave.

On the other hand many tombs, for instance the chambered long barrows of the West Country, betray a different tradition. These are the gallery-graves, consisting of slab-roofed megalithic galleries having the appearance of passage-tombs which have lost



Yvon

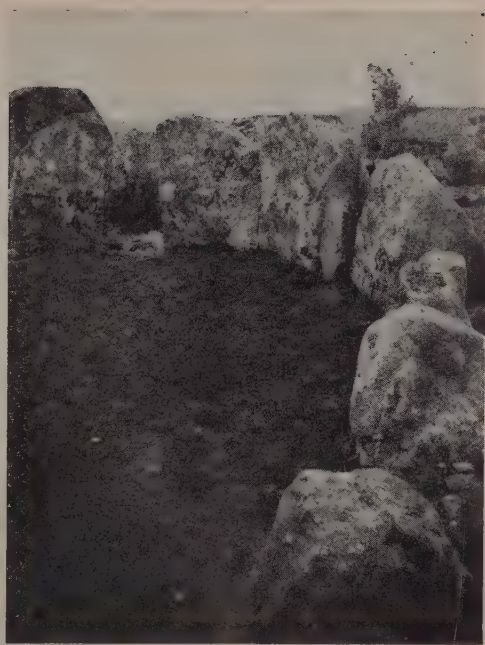
The Carnac district of Morbihan, south Brittany, has a profusion of megaliths of all types, among which mysterious alignments of standing stones (above) are best known. (Below) A massive example of a 'gallery-grave' at Carnac; it is long and rectangular, roofed with slabs and originally buried in a tumulus or cairn

Yvon





(Top) A series of megalithic chambers, probably all originally contained in a long cairn, at Malinmore, County Donegal. (Bottom) Megalithic chamber at Rostellan, County Cork, washed by the sea. A change in the relative levels of land and sea has occurred since its erection



Photographs from the Author

(Left) *What a hilltop cairn looks like: the entrance to the corbelled cupola of Slieve Gullion, County Armagh. (Right) One of the curving 'horns' of an Ulster horned cairn, leading to the now roofless segmented chamber, at Ballybriest, County Londonderry*

their terminal chambers. The galleries are frequently segmented, that is divided into two or more rectangular sections in which the burials were made, and they are generally associated, as in the long-barrows, with elongated mounds or cairns. It has been argued that the whole series of gallery-graves represents a secondary branch of megalithic architecture evolved from the passage-graves, and it is pointed out that certain forms, such as the subterranean long cists of Sweden and north Germany, date from the full Bronze Age. But in other regions they appear to be contemporaneous with the passage-graves, and the whole series has been plausibly derived from the rock-cut tombs of the Balearic Islands and Sardinia, where megalithic galleries are well-known (the Giants' Tombs), having imposing semi-circular forecourts and holed-stone entrances. It would appear that a line of diffusion led from the western Mediterranean across the Garonne isthmus and up the west coast of France, and there is some evidence to suggest that this sect of the megalithic cult held aloof from the rival school of the passage-graves.

It is true that both port-hole entrances and

forecourts are ritual elements which occur also in the Iberian foci, but further afield they crop up more particularly in connection with the derivatives of the gallery-graves. In northern Ireland and south-west Scotland the segmented gallery-graves with semicircular forecourts (horned cairns) constitute a vigorous regional culture unmistakably linked with the western Mediterranean and sharply differentiated from the passage-grave cultures of the central parts of Ireland.

Two other variants of megalithic construction, one of them richly represented in the British Isles, are stone circles and alignments. The latter, of which the best known examples occur near Carnac in the Morbihan, are long parallel rows of standing stones. Somewhat similar avenues and single lines of standing stones are also found in the British Isles, where they are specially associated with stone circles of different kinds. The alignments have defied explanation and do not appear to be directly connected with burial sites, but they are regarded as a late (Bronze Age) development of Breton civilization, which, notably in the Morbihan, blossomed or degenerated into many megalithic freaks. Here too we



(Left) *Hal Tarxien, Malta; decorated slab in third temple.*
 (Below) *Spiral-engraved kerb-stone at the entrance to the corbelled passage grave at New Grange, County Meath. Some of the other kerb stones and many of the uprights in the chamber are similarly engraved*



Photographs from the Author

find stone circles, and one on the island of Er-Lannic now lies half submerged in the tidal waters of the Gulf of Morbihan, a reminder that the slight change of sea-level which has occurred since the early Bronze Age may have submerged extensive coastal flats in other regions, for example Cardigan Bay, and destroyed some of the evidence of megalithic diffusion. A small burial chamber

(dolmen) at Rostellan, County Cork, is similarly washed by the tides.

No megalith has attracted so much attention, both popular and scientific, as Stonehenge, yet it preserves most of its secrets. It is known to be a composite construction and to comprise several elements, including the avenue of approach, the outer ring of, originally, thirty sarsen uprights with lintels

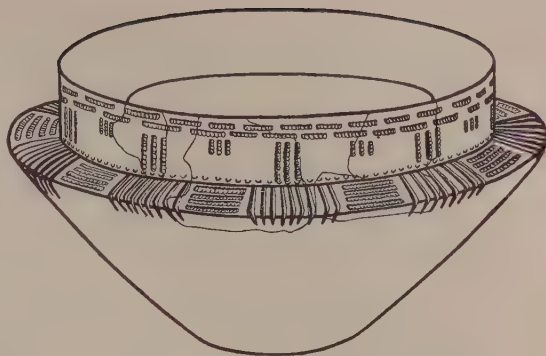
mortised to them, five sarsen trilithons arranged in a horseshoe, and an inner horseshoe of 'foreign' blue stones, which must have been brought from the Mynydd Presely in Pembrokeshire.

Even larger and more complicated is the great circle at Avebury, containing smaller circles within its ring, surrounded by an immense ditch and bank enclosing an area of nearly thirty acres, and approached by a stone avenue two miles long. Then there is the remarkable 'Woodhenge' discovered from the air near Amesbury, consisting originally of a series of circles of wooden posts, which may have been the prototype of the trilithons at Stonehenge.

While these circles were not primarily burial places they are undoubtedly inspired by the megalithic cult, influenced in the Salisbury Plain region by other culture currents deriving from central Europe. Ceremonial circles and earthen rings of many types, dating in general from the early days of metal, are widely scattered through the British Isles: they are believed to spring, like Stonehenge itself, from the fusion of the megalithic idea with contemporary cultures of continental origin.

But we must confine our attention to the megalithic graves themselves and the civilization they stand for. The contents of the Iberian tombs give us a fairly full picture of the religion and daily lives of their builders. They contain, in addition to as many as 100 burials, polished stone axes of rare materials, finely decorated pottery vessels, beads of copper, silver, gold, ivory, amber, shell, bone and precious stone, fine flint arrowheads and other weapons, copper pins and daggers, axes, awls and pincers, and small 'idols' engraved on slate palettes. Here as elsewhere it can be shown that wheat and barley were cultivated and textiles woven. Axes, adzes and gouges testify to carpentry. The megalith builders dwelt in hill-top townships surrounded by their olive orchards and must have lived much the same kind of lives as Mediterranean peasants have enjoyed through all the ages that have passed since. Cattle, sheep, goats, pigs and dogs can be identified from their bones, and it is probable that the system of seasonal migration from parched coastlands to summer hill pastures, the transhumance of the geographers, was already practised.

Traces of plaster and painting on the walls of their tombs remind us that what is now left may be merely the bare shells of elaborately furnished houses for the dead. Wherever the graves have been carefully excavated



In Denmark the 'Fine Early Style' of pottery is ornamented with comb-impressions: reconstruction (after Müller) of a vessel from the passage grave at Ormshøj, in the Danish island of Zealand

down to the old ground level a most complex structure has been revealed. Here, as in regions further north, the foundations were carefully prepared by laying down and doubtless consecrating a floor of clean earth. We can but guess at the funerary ritual which absorbed them, but we can say from the evidence of the grave goods that the element of trade was inseparable from the religious rites; and it is this combination of trade and religion—a combination frequently noticed in historic as well as archaic civilizations—that provides a clue to their voyagings and their far-flung relationships.

Favourite materials for beads, for instance, were amber and callais, a rare green stone for which no source in western Europe has been discovered. Callais beads have been found in great numbers in the tombs of Portugal and the Morbihan: they also occur in Almeria, Provence, south-west France and the Marne. Amber has been found in the Almerian tombs, in Portugal, Finistère, the British Isles, and as would be expected, in the Baltic region. Further evidence of trade relations comes from the finely polished axes of rare stones such as jadeite, fibrolite and chloromelanite, which characterize the tombs of Brittany and Iberia alike, and in the distribution of certain specialized styles of flint tools and arrowheads.

But it is the forms and ornament of pottery deposited in the graves that tell us most about their builders. The frequent imprints of grains of wheat and barley and other seeds, for instance, accidentally impressed on the bottom of a pot when it was being made by

the fireside, not only establish the cereals that were grown but have enabled careful Danish archaeologists to say what crops were *not* cultivated and even what varieties of weed bothered the Neolithic farmers of Denmark. Decorative techniques include burnishing and rippling, imitation cord and stitch-lines on vessels thought to be copied from leather originals, and above all the notched-line or comb style, made by impressing a notched wheel or a comb in the soft pot. The prevalence of the latter style in Iberia, where it is considered to have evolved from imitations of baskets, suggests that the Spanish ladies of the period already carried their combs ready to hand in their hair, for it was the women who, as in all societies before the appearance of the potter's wheel, moulded the vessels by hand. In Denmark what is termed the Fine Early Style of pottery is similarly heavily ornamented with comb-impressions, which thus constitutes a truly international element in megalithic art.

The forms of vessels are also eloquent of a common cultural tradition. There is for instance the 'bell beaker', so called from its shape, a vessel astonishingly uniform in style, which makes its first European appearance in southern Iberia and was thence diffused throughout the Peninsula, and overseas to Brittany and the Channel Islands, to southern Italy and to western Ireland. The carinated round-bottomed bowl has an even wider distribution and is the commonest of all megalithic vessels in Northern Ireland, where fragments of some 2000 examples have been recovered in recent excavations of the horned cairns. Many decorative details of the abundant megalithic pottery of western Europe can be traced back to Eastern Mediterranean sources, for instance the double eye (oculi) ornament which found its way round to Denmark.

Engravings in the tombs themselves, whether on the stones of the chamber or on the kerb-stones supporting the cairn, tell the same story of a common artistic and religious tradition. Some of the patterns found on Irish megaliths reproduce the designs of the Portuguese slate idols: indeed it has been shown by the Abbé Breuil that there is hardly a single element in the corpus of Irish megalithic art—which has recently been enriched by Professor Macalister's discovery, at Knowth near New Grange, of 50 elaborately decorated stones—that cannot be matched in the engravings or paintings of the Peninsula.

The designs consist of derivatives from human representations, concentric circles, serpentine lines and animal stylisations, but

most notable are the finely-executed spirals such as those on the entrance slab at New Grange. It is clear that Brittany, where certain passage tombs are richly ornamented, played a prominent part in handing on the megalithic art to Ireland. Recent publications on the subject, reacting against extravagant phallic interpretations, have laid little stress on the sexual element in megalithic iconography, but the 'statue-menhirs' of south France, the symbolic male and female stones which have been recognized in Ireland, the Isle of Man and Sardinia, and the survivals of fertility cults in connection with many megaliths, point to an interest in sex such as students of early religion would expect.

Many relics of the megalithic tradition may still be traced in the westernmost parts of Europe, especially in Brittany and Ireland. Here the Celtic Church took over many pagan sites, and ritual visits to the megaliths are sometimes made to this day in Brittany. The standing stones were re-consecrated by the addition of a cross, and in Ireland we find many early churches, whose architectural styles betray megalithic influences, built inside circles. Cup-marked stones are frequently associated with these sites: they were made by grinding out shallow holes, possibly to obtain the powdered stone as potent medicine. Nowadays such cupmarks may serve to invoke blessings or curses by turning pebbles in the cavities, with or against the sun. Fertility rites are still carried out at certain megaliths, but also at the holy wells which are scattered in their thousands through the Irish countryside and vividly remind us, in this humid landscape, of the sunny Mediterranean shores where the megalithic religion and its associated cults took shape over forty centuries ago. These water festivals are typically associated with St John the Baptist and his midsummer feast, an interesting example of the appropriation of pagan consecrations by a suitable Christian dedication.

In other parts of the megalithic province the early Church Councils constantly fulminated against the rites at great stone monuments, yet they could not entirely destroy their deep-rooted hold in the tradition and folk-beliefs of western Europe. The Christian saints travelled along the megalithic seaways from Iona to Compostella, and the medieval pilgrimages traversed the same paths. Geoffrey of Monmouth tells us that "Giants in the old days brought from Africa the stones which the magic arts of Merlin afterwards removed from Kildare and set up at Stonehenge," an apparently fantastic

statement which might, in fact, serve as a text for a modern discussion of the whole megalithic question.

There can be no doubt that the men of the megaliths had an intimate knowledge of the coasts they followed and were keenly aware of the qualities of the rocks. They had discovered and utilized a certain small exposure of metamorphosed basalts in County Antrim which escaped the notice of the Geological Survey, and which was located a few years ago by following up the clues provided by archaeological finds in the locality! The concentration of megaliths at sea and river entries is the most noteworthy fact. The splendid group of passage tombs which includes New Grange and Knowth lines the banks of the Boyne a few miles above Drogheda, while the Carlingford culture of the horned cairns is strikingly centred on the twin entries of Carlingford Lough and Dundalk Bay. The regions around Dublin Bay and Waterford Harbour also have their own cultures. And in each case the spread of the culture inland can be traced by careful mapping, morphological study and the excavation of selected sites. The way in which detached masses of hill country were used as stepping stones is clearly demonstrated in the map on page 297. Nearly all the megaliths on this map are situated above the 500-foot contour: the optimum height for settlement lay somewhere between 400 and 800 feet. Their builders, however, did not avoid the lowlands if suitable light soils could be found there; in Scotland, for instance, the extensive raised beaches attracted them more than the hills, and they utilized the bare limestones and gravelly moraines of the Irish midlands. What they did avoid were the cold heavily forested clays deposited by the ice sheets. In Northern Ireland we find their relics near the uphill margins of the boulder clays, on thin residual soils or gravelly slopes which not only supported no heavy timber but offered opportunities for cultivation with simple appliances. It is a disputed point whether or not the light Mediterranean plough, the wooden *araire*, had reached northern Europe by this time, but it can be shown that the tools and customs of the agricultural pattern of Ireland, as they survived far into the historic period, were based on hill-slope cultivation. The Irish peasants long clung to the hills and readily sought refuge there in times of difficulty. There is in fact a good deal of evidence to show that

the civilization implanted by the megalith builders was of basic importance for the shaping of the historic regional folk-cultures of western Europe. Students of political geography will observe the coincidence between the Carlingford culture and the present province of Northern Ireland. Both are based on the sea entries from Carlingford to the Foyle, and the distinction in matters of folk-culture between the northern part and the rest of Ireland is more ancient and fundamental than the cleavage caused by immigrant planters and their response to the Industrial Revolution.

The reader will perhaps wonder why, for our knowledge of megalithic civilization, we rely so completely on the graves and not on habitation sites. There are two considerations involved here. On the one hand it is a fact that most archaeological reconstructions are based on an examination of grave contents, partly because they offer undisturbed or 'closed' sites for excavation, partly because the graves themselves are easily recognized, and partly because in ancient times there was less distinction than exists nowadays between the secular and the religious life. On the other hand it is a fact that very few habitation sites of the megalithic period have been discovered and still fewer excavated. This is one of the objectives of post-war research. But already we know that the houses of the period, alike in Denmark and in Ireland, were both circular and rectangular in plan, and there are hints that the basic styles of house construction, like so much else in peasant life, were introduced by the men of the megaliths.

Enough has been found, at any rate, to tell us that the picture of early civilization revealed by the graves is substantially complete. The belief in immortality which the tombs so strikingly symbolize was the natural accompaniment of a civilization rooted to the soil, dependent on crops and herds and inspired by the recurrence of seedtime and harvest, of continuity from the past to the future.

If the megaliths still keep many of their secrets they will preserve still longer their capacity to inspire the imagination of laymen and specialists alike. But the international cooperation of archaeologists in the post-war world will surely demonstrate more clearly than hitherto that Europe of the Sea was first welded together in its basic civilization by the men of the megaliths.



The Egyptian Villager

by MAJOR BORIS GUSSMAN

THE passing of the centuries, and the endless exploitation of a line of masters that have included six different nationalities, have wrought few changes in the everyday life of the Egyptian peasant, or fellah as he is called.

In the time of the Pharaohs, three and four thousand years ago, pictures and reliefs carved on the stone walls of temples and tombs show the contemporary fellah to have been very much as they are today: the same kind of people, using the same rough tools in the same manner, and leading a life as hard and as simple as they do now. Only in religion have there been changes, and these are on the surface. In the far-off days of the Dynasties the fellahin worshipped the sun. Shortly after the Romans took over the country, Christianity spread like wildfire down the Nile valley and converted the entire population. Then in the 7th century the

Arabs invaded the country and introduced the Moslem faith. But many of the old beliefs derived from his sun-worshipping days still survive, and the fellah's religious outlook is heavily tinged with superstitions derived partly from early Christianity, but mainly from the pagan days of sun worship.

As is to be expected from the number of different peoples with whom they have intermarried, there are considerable racial differences in these people's appearance. Throughout their long history, Ethiopians, Libyans, Romans, Greeks, Persians, Turks and white slaves from Southern Russia have been absorbed, and traces of all these different types still remain.

Those living in the Delta and as far south as Cairo are fair-skinned and often of almost European appearance. The farther down the Nile one gets the darker becomes the peasant,



Photographs by the Author

A fellaha milking her water-buffalo ('fellah' and 'fellahin' are Arabic for peasant, singular and plural; the female form is 'fellaha'). Most of the buffalo are pastured in small clover fields, divided by irrigation canals

until in the neighbourhood of Aswan there is a definite negroid element. There are, however, pockets of fair-skinned peasants far to the south, and very dark types in the Delta.

Though there is a great deal of agricultural land in Egypt, the most fertile land in the world, the fellahin own very little of it. Most of them have a small strip that they coax and worry into producing four or five crops each year. They and their animals live on the produce of these crops, and by working for rich farmers or on the cotton fields of millionaires, they manage to eke out a small surplus each year. The average annual income before the war was between two and three pounds sterling.

The fellahin live, like Arabs, in little mud-brick houses extremely vulnerable to water. A high Nile flood or two hours of continuous rain will melt thousands away in no time, but fortunately the Arab loses little if he loses his house. In two days he has built himself another, and as perhaps the only time a house is clean and free from bugs is when it is new, these continual changes are all to the good. A few holes, sometimes interlaced with twigs,

serve as windows, and the roof consists of a reed mat or some dura stalks cemented with mud. In a house that has stood for some time these roofs take on a very odd appearance, for they are used as dustbins. Everything we put in drawers, cellars or cupboards, the Arab stores on his roof, and he puts a lot of rubbish up there as well. The result is that an Arab village with house-tops of every conceivable size and shape has rather the appearance of a town that has just suffered a particularly heavy air raid.

Inside the houses there are sometimes two rooms, but more usually one. This serves as the communal living-room, bedroom, stable and hen-coop. A few dried palm leaves serve as beds, and if the family is lucky enough to possess a blanket they all sleep under it together.

Fortunately the climate permits the fellah to lead an almost completely out-of-door life from his earliest childhood. He uses his house solely for cooking and sleeping. Were this not so, the complete lack of the most elementary sanitation would push the already high mortality rate to staggering proportions.



(Top) A mud-brick fellah home. Note dura stalks and rubbish piled on the roof. (Bottom) The family and their animals taking a midday rest in the shade

The village as a whole is quite independent. The most important man is the potter who works all day to provide the pots and pans required by the women folk. His wheel and the shape, decoration and design of the pots he produces have not altered in five thousand years. Other specialists make bricks, ropes, baskets and rough cloth, all offered for sale or exchange at the local weekly market.

During the day-time, those who have no other business work either on their own strips of land or in the fields of the better-to-do. The main problem is irrigation. Channels have to be dug and kept clear, and all must obey without question the commands of the engineer with his spirit-level, for if one man alters the elevation of his land but a few inches he may dry up an entire field several hundred yards away. The great dams built all the way down the river have guaranteed that there is always sufficient water. In consequence there is no dependence on the rain, or whether the Nile will be high enough to ensure a good crop.

While there is sufficient water in the canals, it is quite another matter to get it up to the fields. Today, as in the times of the Pharaohs,

the fellah uses two tools, the *sakiya* and the *shaduf*, to raise his water. They are slow and laborious, and he has to spend a third of his time raising water; the consequent drain in man-power of these antique methods is most uneconomical. He has to work for three days on the *shaduf* to irrigate an acre of cotton, and during the season this must be done every ten days. It is very hard work.

While their husbands are in the fields, the women are as laboriously occupied. They do all the household work, cook, scour, wash clothes, look after the children in a rather half-hearted sort of manner, minister to the needs of their poultry with far greater care and attention, and finally bake bread. The lack of fuel precludes this from being done more than once a fortnight, and if they can provide a hot meal once a week they are satisfied that their men folk are as well looked after as circumstances permit.

They are up before sunrise preparing a meal and sometimes washing themselves in the river, though this is a ritual that has but a small following. Attempts by governing officials, doctors and welfare workers to introduce a higher degree of personal cleanliness



Ready for market: animals owned by the Egyptian peasants are so domesticated that they never try to escape. The baskets are made of split date-palm branches



(Above) *Sheep and goats come down for a drink outside an Arab village near Cairo.* (Opposite, top left) *In a Theban village: children are placed in these 'cradles' at night to keep them safe from snakes.* (Bottom) *Nubian girls at Thebes. These girls are rather lighter skinned than normal, but living near the ruins of Egypt's most fascinating—and most visited—site, it is probable that there is a mixture of European blood.* (Right) *A potter at work at his wheel; the method has not changed in design for three thousand years*

among the peasants generally has always met with greater success among the men. If public wash-houses are erected, some of the men can be persuaded to use them instead of the river. The women dislike both river and wash-houses and use neither.

The children help their mothers to look after the livestock. They start at a very early age, and it is a common sight to see half a dozen fierce water-buffalos herded and driven by a small boy or girl little more than seven years old. From their very earliest days they have complete mastery over their animals. This is probably due to the fact that they live

in such close proximity to them. Living and sleeping together, the animals come to look on them very much as one of themselves, but as one whom they have to obey. In so far as domesticity goes, our own domestic animals are half savage in comparison. The fellah's donkey is never obstinate, and his horse is never savage. His cattle and sheep never need a dog to herd them, and chickens, turkeys and pigeons never try to fly away if they have been placed in a certain spot by their masters.

It is often said that the fellah is cruel to his animals. The urbanized Egyptian is often



cruel, and he is the man the average tourist or visitor sees. The real fellah seldom comes into town and never with his animals. The urbanized peasant is, like most town-dwellers, unable to understand animals and he has none of the countryman's love for them. The real peasant has a deep affection for his animals and he seldom if ever ill-treats them. He could not afford to do so. He is too dependent upon them. He often gives them extremely heavy work, but he never expects his animals to work longer hours or carry comparatively heavier burdens than he himself would attempt. Both master and beast

are accustomed to a hard life, both come from a long line of ancestors who have lived the same hard lives, and in consequence both can undertake for long hours each day tasks that would appear to the casual observer as far too heavy for the man and cruel to the animal.

Ill-health dogs the fellah's footsteps from the day he is born. By some strange tradition that goes too far back in time for its reason to be ascertained, there is a superstition that a child should not be washed for the first seven days of its life. Almost all the peasants subscribe to this belief. Con-



Arab houses alongside a canal. These canals are dried up during most of the year

sequently from its earliest days a baby's face is crawling with flies and grubs that more than anything else are responsible for the appalling eye afflictions to which the majority of the population are so prone. Ninety per cent of the peasants are either blind in one or both eyes, wall-eyed, squint-eyed or suffer with a cataract.

Fear of the evil eye is another superstition that all respect, and that also helps to build up the statistics of ill-health. Lest it might attract the eye of envy that a passer-by could cast, a mother will keep her child in rags and in as filthy a condition as possible. For some reason, perhaps because they are reckoned to be of greater value, little boys are regarded as being more liable to the evil eye than are little girls. So, in order to deceive the eye, the boys are often dressed as girls until they reach an age when they can be considered reasonably immune. This practice is very often resorted to in the case of an only child.

The infant mortality rate is enormous. In every three children dies before reaching the age of two. Those who do survive are extremely hardy, as indeed they have to be to withstand the diseases and the dangers that are on every side. Their playground is the yard in which cattle and poultry are the first consideration. When thirsty, children can be seen drinking puddles in the roads, and should they fall and hurt themselves they soon discover, if their mothers have not already told them, that dirt rubbed into the wound is as good a way of stopping bleeding as any other.

Owing to the system of perennial irrigation

developed by the great dams whereby the soil is kept constantly moist, a new plague has come to Egypt. Its only victim is the fellah. Bilharzia and ankylostomiasis are diseases caused by worms that penetrate the skin and enter the bladder. In the past, when the soil dried up at least once a year, the microbes responsible for these plagues were destroyed. In the soft wet soil they live throughout the year, grow up and disperse into the river. As a great deal of every fellah's work is either in or near the river, he falls an easy victim. Today, over sixty per cent of the people suffer from one or the other. The effects are not in themselves mortal, but they undermine vitality and render the people liable to other diseases. If the fellah is lucky enough not to contract any other disease, he still goes through life feeling only half alive. He does not know that it is the dams that have given him a birthright of ill-health second to no other nation. He thinks it is the will of Allah. Perhaps by the time he finds out the truth, science will have discovered a cure, or, better, a preventive.

For all his misfortunes the fellah is not unhappy. Centuries of ill-treatment have immunized him to most forms of hardship, and he remains content with his simple, tasteless food, his mean little house and his poverty, because he finds compensation in his faith. As a Moslem he knows that although a poor man and an unlucky one, he is for that very reason more sure of eternal happiness in the world to come than are the greatest of the Pashas. Beyond this touch of philosophy, the Islamic faith plays little part in his life, which is built up on many forms

of superstition and false doctrine. The belief in spirits, both good and bad, dominates his every act, and no small portion of his meagre fortune is expended to satisfy one or other supernatural power who might otherwise attempt to do him harm. Magicians flourish on credulity and ignorance, and eke out a substantial income by the sale of charms that are often inscribed with the names of Christian or Moslem saints.

In his social life the fellah has little to learn from 20th-century civilization. He has but one wife, if only because one dowry is as much as he can ever afford. Morality is very stern, and a girl who misbehaves herself before marriage is killed by her family and thrown into the river. Such treatment may seem severe to us, but it shows that morally the people have a high standard.

They are extremely honest, both among themselves and in their dealings with outsiders. There is a universal custom in Egypt of placing drinking water and a cup at various points along roads and camel tracks so that travellers can refresh themselves on their journeys. In and around the towns it is necessary to chain these cups to the wall. In the villages, where 'civilization' can scarcely be said to exist, the cups are never tied up.

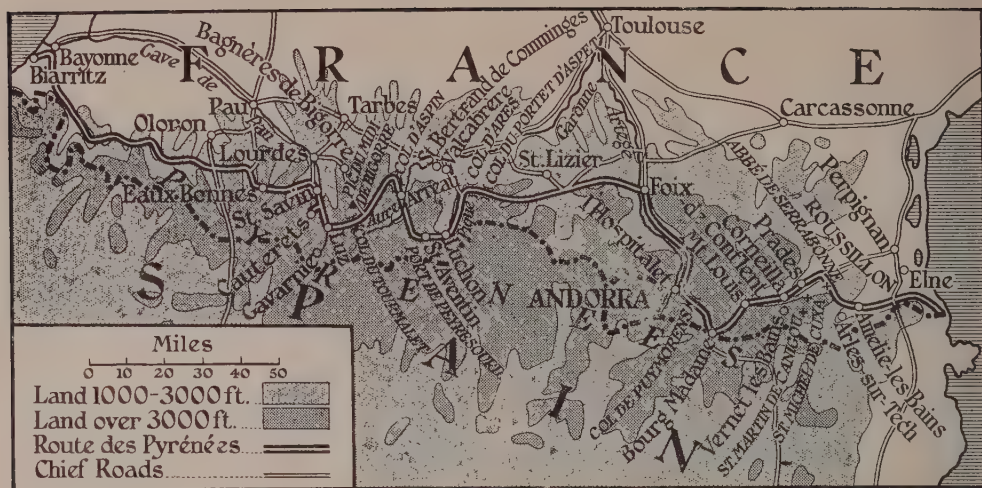
The peasants are always willing to share their frugal meals with others less fortunate than themselves, and their kindness to those in trouble is proverbial. Upon such foundations of character a very fine people could be developed. But there is so much for them to learn, and short cuts to civilization are so disastrous, that unless great care is taken and unstinted efforts are made, these people may go the way that many other primitives have gone after making contact with a much higher civilization.

As communications are opened up buses develop routes into the furthest corners of the country and bring back to the towns more and more peasants. They wander about and marvel at the things they see—the easier life of the townsfolk and the greater comforts that appear so easy to obtain. The younger men return to their villages in the deserts with ideas that both surprise and shock their parents. The work on the shaduf and the sakiya appears monotonous and ill-rewarded, and the towns call. Every year more and more of the peasants will assuredly go into the towns unless something is done to ease the burden of their lives and iron out the disparity, in individual comfort, that exists between those who live in the towns and those who live along the banks of the Nile. The



A woman and child of the true Nubian type from a village in Upper Egypt. At her feet is a patterned metal-covered corn measure made by village craftsmen

Government has built a few model villages where, rightly, more emphasis is placed upon a correct understanding of simple agriculture and personal hygiene than upon the necessity for reading and writing. Good as the results of these experiments have been, they are still at best only nibbling at the problem for there are nearly ten million peasants, and Egypt's future, at least for the next generation, depends upon a prosperous and contented peasantry. For she is still essentially an agricultural country.



Stanford, London

On the Route des Pyrénées

by ARTHUR GARDNER, F.S.A.

THE Pyrenees lie along one of the main routes of commerce between the Mediterranean and the Bay of Biscay through Carcassonne and Toulouse, and in the great days of ascetic monasticism monks and hermits, seeking a refuge from the turmoil of life in the world, found that the foothills and remote valleys afforded places of refuge in what was then a wild and desolate region. The Route des Pyrénées is an interesting alternative to the better-known Route des Alpes, and if the mountains fall short of the full splendour of the greater Alps the monuments are certainly not inferior in numbers or interest.

I made the trip illustrated in this article early in June 1936, just before the opening of the tourist season and before the railway autocars started their regular service along the Route des Pyrénées. In the early summer expeditions to the higher mountains were hindered by snow, but the flowers were at their best. Whole hillsides were ablaze with golden broom, the fields were gay with graceful blue columbines, while the higher regions where the snow had just melted were dotted

with gentians and narcissis. The road is a gigantic switchback over the lateral ridges which drop from the main range to the northern plain: it is magnificently engineered, and though several of the passes exceed 5000 feet above the sea, the surface is, on the whole, quite good. As I and my party had our own car we were not tied to the regular route, and the roads crossing it in the valley bottoms enabled us to diverge to right or left in order to visit objects of interest.

It is usual to start from Perpignan, a town of some importance which possesses in its Cathedral an excellent example of Southern Gothic of the 14th and 15th centuries. Its chief feature is the vast span of its vault, 60 feet wide and 90 feet high, which is supported by a system of internal buttresses, with side chapels between. In this way the huge scaffolding of flying buttresses exposed to the weather, with which we are familiar in the north, is avoided, and the whole design is practical and logical. If the wide internal space, uninterrupted by arcades, is less fascinating than the narrower pillared aisles



Photographs by the Author

The cathedral of St John at Perpignan is a good example of the southern type of wide, aisleless church. The buttresses supporting the wide stone vault are brought under the outer roof and enclose side chapels. The vault is fifty-three feet in span. The church was begun in 1324 but not finished until 1509

and soaring vaults of the north, it is sound engineering in stone and has an impressiveness of its own.

Instead of following the direct road to the west it is worth while to diverge to the south to visit the ancient town of Elne, which possesses an ancient church and one of the finest cloisters in France. It is built of marble and contains interesting sculptures. It was badly damaged in a siege in 1285, necessitating a 14th-century reconstruction, when a stone vault was added; but as the old capitals and shafts were mostly re-employed and only a few gaps filled with later work, the general effect is still that left by the original 12th-century builders. There is another Romanesque church with a later cloister at Arles-sur-Tech, not far away, and in fact this district of Roussillon is full of interest to the antiquary. We found good quarters for the night at the decadent little watering-place of Amélie-les-Bains, where our chauffeur was delighted to find he could wash the car by a natural spring of hot water bubbling out of the earth in a fountain in the market-place,

which must be a great fuel-saver in war-time!

From Amélie we turned north over one of two not very high passes to get back to the main road round the flanks of the Canigou, the last big peak at the eastern end of the chain. On the way we passed a notice, "à 100 metres Abbaye de Serrabonne". We got out of the car expecting to find the abbey just round the corner, but found that the notice only pointed to the beginning of a mountain track, and it was not till we had walked considerably more than a mile and climbed about 1500 feet that we found the ruins, and then we had to walk another half-mile to the nearest farmhouse to find the keys. The abbey was, however, well worth the exertion. It is finely placed, overlooking a narrow gorge, has a picturesque arcaded gallery with 12th-century capitals carved with lions and other monsters in a pink local marble, of a type fairly widespread in this part of the world, and a church with a Romanesque doorway and, above all, a richly carved narthex or low-vaulted porch with more early carvings.



(Left) the lovely marble cloister at Elne, built in the 12th century, reconstructed after a siege in 1285, mostly from the old material. (Below) The enclosed 12th-century porch of the Abbey at Serrabonne is richly sculptured. (Opposite) Abbey of St Michel-de-Cuxa, now a ruin incorporated in a farm. The surviving tower seems to date from the end of the 10th century





After reaching the main western road there is another diversion to be made to the once important abbey of S. Michel-de-Cuxa, up a side valley with fine views of the Snowy Canigou ahead. This famous monastery was founded in the 10th century, and the church seems to have been reconstructed about 1020. The existing ruins are incorporated in a farm, and the chief feature is a tall transeptal tower, the survivor of a pair which once flanked the church, one of the finest examples of this early date in France.

Returning to the main road, we reached Prades, where some more of the pink marble capitals, probably from the cloister at Cuxa, have been built into the façade of the church, and then turned south through Corneilla-de-Conflent, where there is another fine 12th-century church with a sculptured doorway, to the little spa of Vernet-les-Bains. It was a favourite resort of Lord Roberts and Rudyard Kipling, and boasts an unintentionally comic monument to the *Entente Cordiale*. The old town is crowned by a church and castle, and stands up over the valley. A short stroll leads to the attractively named Fontaine d'Amour, where there are stone seats and tables provided for what the local guide calls *pique-nique*, beside the mountain torrent and commanding a good view of the Canigou, gleaming with snow at this time of year. The most interesting excursion from Vernet is to the abbey of Saint Martin-du-Canigou, which crowns a pinnacle of rock about 1400 feet

above the village and is reached by a good but steep path. It was founded about the year 1000, and part of the church, the crypt and the tower seem to belong to the 11th century. There is also a cloister gallery, with more of the Pyrenean capitals. The buildings had fallen into ruin and were cleverly restored, mostly out of the old materials; but this work, though possibly necessary for its preservation, detracts somewhat from its look of antiquity.

From Vernet we returned to the Route des Pyrénées and drove through Mont Louis, a garrison town 5135 feet above the sea, situated in a wide upland valley, rather bare but carpeted with Alpine flowers, to Bourg Madame, a frontier post by a road into Spain. Thence over the Col de Puymorens (6286 feet), a high and bleak plateau with many of the lovely little star gentians growing beside the snow patches which had not yet melted, to L'Hospitalet, whence tracks lead into the remarkable little independent state of Andorra, we descended to the valley of the Ariège as far as Foix, where the towers of the Castle of the Counts of Foix crown a steep rock overhanging the river.

A short run from Foix leads to Saint-Lizier, where there is an interesting church with a 14th-century brick tower in the Toulouse style, and a very beautiful 12th-century cloister with interesting sculptured capitals. A later upper storey in wood was afterwards added. Two more passes of moderate height, the Col du Portet-d'Aspet and the Col d'Ares,



The little watering-place of Vernet-les-Bains (above) stands over two thousand feet above the sea at the foot of the Canigou. The old village, crowned by church and castle, is grouped on the hill overlooking the modern town. The ancient Abbey of St Martin-du-Canigou (left), built on a pinnacle of rock. Founded in 1007, it became ruinous but modern restoration has preserved church, cloister and monastic buildings, though at the cost of their look of antiquity

lead to the valley of the Pique, a tributary of the Garonne. A little way up the valley on a commanding height stands the most imposing church of Saint Bertrand-de-Comminges, founded by St Bertrand *c.* 1082. The fortress tower is capped by a wooden gallery like a castle, and the greater part of the church was rebuilt in the 14th century, and contains elaborately carved wooden screens and stalls of the 16th century. A crocodile skin, supposed to represent a dragon brought from the East by St Bertrand, is hanging up in the church. The west door with its interesting sculpture representing the Adoration of the Magi appears to be early 12th-century work, and to the same period belongs the beautiful cloister, whose capitals betray considerable Moorish influence. In one pier of the arcade the usual shafts are replaced by statues of the Four Evangelists. At the foot of the hill stands the 11th-century church of Valcabrère, which has a 12th-century doorway flanked by statues of unusual types.

A run of about twenty miles to the south leads to the popular thermal station and holiday resort of Luchon, a centre for many excursions into the mountains. One of the most popular of these is to the Lac d'Oo, situated in a remote valley 4912 feet above the sea and reached by a walk of some two miles rising 1500 feet from the end of the road. The ridge overlooking the lake we found covered with daffodils, not the little wild ones of our own woodlands but big ones, more like those in our cultivated gardens; but the weather was not kind to us, and the treeless lake with low cloud hiding the snowy peaks gave an impression of savage desolation which a clear sky and sunshine might have dispelled.

Some three miles from Luchon is the interesting 12th-century church of St Aventin, in the walls of which some quaint early carvings are incorporated. The villagers were busy splitting a tall fir tree in order to fill the interstices with tow and other combustibles in preparation for its use as a huge blazing torch on St John's Eve, after which there was to be a scramble for the ashes to serve as fertility charms, a survival of a pagan midsummer festival which the Church, being unable to suppress, had been wise enough to adopt and baptize into Christian use.

From St Aventin the road rises to the Port de Peyrourde (5070 ft.) and then descends to the Valley of the Aure near Arreau. Coming down from the bare uplands there are delightful views as the road winds down through woods and flowery meadows. Another steep climb leads to the next valley over the Col d'Aspin (4912 ft.), from the upper part

of which views of some of the finest scenery on the route are to be obtained. On the east side the beech woods climb almost to the top of the pass, and the sparkle of the fresh spring leaves provided a lovely foreground to the snowy ranges rising beyond the wide valley and wooded slopes up which the splendidly graded road mounts in great curved sweeps, and were a pleasant alternative to the dark pine foliage usually found in such places in the Alps. The further side commands a fine view of the Pic du Midi de Bigorre (9440 ft.), an isolated peak crowned by an observatory which juts out from the main chain and has a very extensive panorama.

On reaching the next valley we found that the opposite pass, the Col du Tourmalet (6933 ft.), was not yet open, being still blocked by the winter snow, and we had to go round by Bagnères de Bigorre and Lourdes to reach our next objective at Gavarnie. On the way we passed the fortified church at Luz, erected by the Knights of St John of Jerusalem. It is surrounded by a crenelated wall and entered by a gatehouse tower, like a castle. This is only one of many indications of the disturbed condition of all this country in the Middle Ages. From Luz the road traverses the beautifully wooded valley of the Gave de Pau, a fine tumbling mountain stream. Gavarnie is famous for its tremendous *cirque* of limestone precipices with waterfalls tumbling over the cliffs from the snowfields above. Here again the weather let us down, and low clouds cut off the tops of the mountains and rendered the scene savage rather than beautiful, though the flowery meadows did what they could to soften the landscape.

As our time was running short and the weather threatened to break, we decided to give up our intended visit to Cauterets, the other tourist centre in this district, and search for finer conditions further from the big mountains. We accordingly made our way through the picturesque village of Saint Savin, where the rather grim church with no windows near the ground again suggests its possible use as a place of refuge, to Lourdes. Here the ugly staring new church, the crowds of tourists come to look on at the religious ceremonies, the cheapjacks and booths and all the tawdry accompaniments of a fair, are rather repellent to the matter-of-fact Englishman, and seem to clash with his sense of decency in religious matters. No doubt religious fervour can at times work remarkable cures, but the miserable invalids wheeled out in the rain in bath-chairs must require more faith than most of us possess if they are to benefit from this class of treatment. Perhaps,



(Above) *The Cloister, St Bertrand-de-Comminges, dates from the first half of the 12th century. The sculptured capitals show signs of Moorish influence. In one place four statues of the evangelists replace the supporting pillars.* (Opposite, top) *The beech woods through which the well-graded road climbs to the Col d'Aspin, whence there is a grand view of the main chain of the Pyrenees; (bottom) on the western descent of the Col d'Aspin the Pic du Midi de Bigorre is a fine object ahead. There is an observatory on its summit. In spring these upland pastures are carpeted with wild flowers*

however, the dull sky and drizzling rain put us into the wrong mood for visiting this pilgrim resort and warped our judgment; in any case they did not induce us to prolong our stay, and sent us on to Tarbes and thence to Toulouse on our homeward way.

The regular Route des Pyrénées would have carried us on to the spa of Eaux Bonnes, and so on to Oloron and eventually to the sea at Bayonne and Biarritz, but the western Pyrenees are not so high as those in the centre,

and though there is no doubt plenty to see and charm the eye, we felt we had seen enough to get a general impression of the country; both of its ancient monuments and of its mountain scenery, as far as the latter could be seen without penetrating into the highest regions or making climbing expeditions among the peaks, which could only have been conveniently undertaken later in the season. How long will it be before these delightful tourist routes are opened up again?





Inns and Inn Signs

by W. E. TATE, F.R.Hist.S.

The author is now engaged in writing a book on the history of English inn signs and has recently completed a revision of the standard work on the subject: Larwood and Hotten's History of Signboards, published in 1866, from which some of our illustrations—including the 'Goat in Boots' on the left—are taken

MANY matters connected with the story of the English inn and English inn signs would repay investigation. To take one or two examples at random, how many village and street names were originally those of local inns? The classical instance is, no doubt, St Paul's 'Three Taverns'. A glance at the bus or Underground map of London will supply many other examples, and there are plenty in the provinces: such as 'Loggerheads', 'Red Bull' and 'Black Bull' in Staffordshire, 'Black Bull' in Yorkshire, and 'White Post' in Nottinghamshire and in Somerset. Norfolk has a 'Cross Keys', and there is a 'Cross in Hand' in Leicestershire and in Sussex. The 'Cross Hands' is part of Bristol, 'Six Bells' is in Monmouthshire, 'White Rose' in the same county, 'Three Horse Shoes' is in Devonshire, 'Five Crosses' in Cheshire, 'Craven Arms' and 'Queen's Head' in Shropshire, 'Halfway House' in Shropshire, with another example in Kent, and of 'World's End' there are at least five examples in various parts of England. All of these are well-known inn signs, and are dealt with as such in books on the subject. As to inn signs used as street names, almost any old town will supply examples. A walk down Fleet Street brings the point out well, since such courts as still remain are almost all named after signs formerly displayed in the court itself or at the entrance.

The normal English licensed House has two elements in its name. First, the 'White Hart', 'Red Lion', 'Royal Oak', 'Green Man', or what not, and second the 'inn', 'tavern', 'hotel', 'stores', 'vaults', or 'shades' which describes, or purports to describe, the type of House concerned. The words are used very loosely, and with little reference to their real meaning. Inn, tavern, and hotel are, of course, the three main words. Even properly used (they are generally used improperly), they do not correspond to the three main types of House known to our old English ancestors: alehouses, winehouses, and 'come-houses'. A 'comehouse' offered lodging, or refreshment and lodging, to its guests; an ale-

house retailed ale; a winehouse or tavern (Latin *taberna*) sold wine. The words inn and hotel are really synonymous, though the latter has now acquired a kind of spurious gentility which the former lacks. The average 'inn' is not really an inn at all, but an alehouse, or a mixture of alehouse and tavern, with perhaps also a spirit licence. Neither alehouse nor tavern is necessarily an inn, though an inn or hotel has usually ale, wine and spirit licences. There is still in licensing law an important distinction between an innkeeper and a mere licensed victualler.

Presumably the confusion arose with the granting to innkeepers of ale, wine, and still later spirit licences. The three types of house began to overlap, and the words are now used almost indiscriminately. So, while virtually every hotel (except a 'temperance' hotel), has an inn licence, a place calling itself a tavern may have a mere beerhouse licence, or may even have beer- and spirits-licences, but not a wine licence. The words alehouse and beerhouse are, quite wrongly, thought to have a somewhat vulgar flavour, and the 'refined' licensee of today gives his establishment every title except the correct one.

'Shades' is a word much used in some parts of the country, but rarely found in others. I conjecture that properly it means much the same as 'vaults', and it was applied to a winehouse or tavern. 'Bodega', which is found in several towns, certainly means wineshop, the word being imported (in relatively recent years?) from Spain.

'Stores' seems to occur rarely before the 1830's. It may well be that the term originated in the period 1830-69, when, as a measure of temperance reform, it was enacted

Until about 1770 almost every London tradesman's establishment had its sign. Cheapside (top) and Fenchurch Street (bottom) in 1760. The subjects are those common in inn signs of today: such as the 'Rose', the 'Anchor', the 'Lion', the 'Golden Fleece', the 'King's Head'



From 'The History of Signboards' by J. Larwood and J. C. Hotten



'Green Dragon'



'Black Bull'



'Cock'



'Bell'

that any ratepayer might open a beerhouse upon payment for a two guinea excise licence. No doubt many such houses were simply retail establishments for the sale of beer which was obtained from a brewery and merely stored upon the premises, not, as in many inns of the period, brewed there. It is a matter of record that when the 1830 Beer Act seemed certain to pass, far-seeing brewery companies began to buy up houses and shops in widely scattered areas, in order to convert them into beerhouses when the law should make this possible. The act was repealed in 1869, but the "ante 1869 beer-houses" still enjoy a privileged position in respect of closure, compensation, etc.

In old directories one often finds houses recorded as posting-houses. In the great days of road travel, a posting-house was a place where travellers with their own vehicles might find a change of horses. Many old inns were also posting-houses, and even nowadays one may see attached to them the remains of a vast range of stabling, with the quarters of the postilions or postboys often situated over them.

Few Houses were originally styled 'hotels'. The proprietor who, to give his House an air of antiquity, calls it 'Ye Old Mowbray Arms Hotel', betrays his ignorance. Hotel is to my mind a nasty word, and one we could well do without. The proper word is inn, and this was the word used until at any rate a couple of centuries or less ago. The 'Mowbray Arms' is a still greater howler. No one until relatively recent years spoke of a House as, say, the 'John o' Gaunt's Arms', the 'Grosvenor Arms', the 'Pierrepoint Arms', the 'Hanover Arms', any more than of the 'Warene Arms', or the 'St Peter's Arms'. The titles of such Houses were the 'Red Lion', the 'Wheatsheaf', the 'Black Lion', the 'White Horse', the 'Chequers', and the 'Cross Keys'. The 'Arms' craze reached great heights a century or so ago, and the curious may find not only the 'Bricklayers' Arms', 'Carpenters'

Arms', 'Paviors' Arms', etc., which may be explained, and to some extent rationalized as referring to the bearings of the old city companies, but also the 'Cricketers' Arms', 'Canal Boat Arms', 'Ploughman's Arms', and even (a very rare and choice specimen this), the 'Railway Engine Arms'.

The 'commercial hotel' came into vogue perhaps a century and a half ago, when certain Houses set out to cater for the needs of 'bagmen', the commercial travellers of the day, and to attract them took this title. Many such survive to this day, each with its 'commercial room', where the tariff is lower than in the 'coffee room' which caters for the ordinary traveller. Apparently commercial travellers have a long-standing preference for beverages other than coffee. For that matter, the title coffee room also is of relatively recent development. The old name was parlour—a very much better and more suitable one.

With the growth of the holiday habit after the 1800's, there came the need for family inns, the 'family and commercial hotels' which may still be seen in many old-fashioned country towns. The Railway Inn, Railway Hotel, Junction Arms, etc. (in one House, unhappily now no more, a landlord with a touch of genius developed the idea into the 'Engine and Tender'), came in with the 1840's, when the railways spread, and the high roads fell into disuse. About the same time the old highroad inns also began to fall into decay, some to become extinct, others to be revived when almost at their last gasp in the early 1900's. The development of the internal combustion engine and its application to the motor car have gone far to counteract the harm done to the English inn by the invention of the steam locomotive. Since 1900 many fine new Houses have been erected by the sides of the trunk roads, and many of the old Houses have entered upon a new lease of life.



'Jack of Newbury'



'Coach and Horses'



'Bull's Head' and—

The names of the various parts of an inn or alehouse are applied almost as loosely as are the titles of the different types of licensed House. In the traditional English alehouse there are necessarily three rooms, the Bar, the Taproom and the Smoking-room, invariably called the 'Smoke-room'. Each of these has a variety of alternative names. The bar may be called the vaults, and the word bar restricted to its original meaning—the wooden counter which is the most prominent object in bars and vaults. A snug, bar parlour, or private bar, is a smaller room, generally communicating with the bar, but designed for conversation of a more intimate nature. The taproom, where it still survives, is essentially a room for games and conversation. It caters for much the same type of customer as the bar, and it sells at bar prices. Ladies, at least in the average really well-conducted inn, are not encouraged to use either bar or taproom. The smoke-room is generally retired to the back of the House, and is more private than the taproom, and much more so than the bar. It is also more 'select' (at any rate to the extent that as a rule its patrons are prepared to pay a penny a pint more for their beer), and it is enriched by the presence of feminine society. Often, nowadays, an entrance hall or lobby at the front of the House is designated the lounge. The lounge also sells at smoke-room prices, and welcomes feminine patronage. Concerts and similar social events generally take place in the smoke-room. Sometimes the smoke-room opens off the lounge—usually it is a smaller room. A typical old country alehouse contains bar, snug, taproom and smoke-room; a typical modern House, bar, smoke-room and lounge.

In some old inns the taproom developed into a separate House under the name of the So-and-so Tap. Perhaps this was often a kind of annexe, set aside for the use of the servants of the ladies and gentlemen who used

the main coaching House. Very frequently it was placed in the yard of the main House, to be convenient also for the ostlers, stablemen, grooms and coachmen. Similarly it happens that sometimes a House had a room set aside for the selling of wine, with the name of the 'Vine', and this, though more rarely, grew into a separate House. In Shrewsbury, the taproom of the 'Talbot', first known as the 'Talbot Tap', eventually grew into a separate House under the name of the 'Admiral Benbow', and the 'Lion's' taproom took the sign of the 'Lion Tap', a title which, after a brief period as the 'Trotting Horse', it still retains. In the same town there were Vines attached to the 'Raven' and to the 'Talbot'.

It is curious how different parts of the country seem to have marked predilections for different signs. According to one authority the 'White Lion' and the 'Black Swan' are relatively common in the south of England, while in the north public taste favours rather the 'Black Lion' and the 'White Swan'. I have not been able to verify the assertion, and offer it for what it is worth. If the fact is so, it is a curious one which should be explained. The 'Dolphin' also is said to be much commoner in the south than in the north. There

—'Rope-dancer'



Drawings by J. Larwood



From the author, by courtesy of Mr George C. Izzard

are some localizations of signs, however, which are quite indisputable. Sometimes they are readily explained, often they are not. The 'Wheel' and the 'Seven Stars' are noted as particularly favoured in Cornwall. It seems a trifle far-fetched to postulate, as one writer does, a Phœnician origin for them in order to explain this. Often heraldic signs (and a great many English inn signs are in origin heraldic) are localized on or near the estates of the families whose arms they were. No doubt many of the 'Talbot' and 'Shrewsbury Arms' in the Cotswold country are connected with the fact that the Earls of Shrewsbury had estates centring round their manor-house of Heythrop, twelve miles

from Banbury, in the direction of the Cotswolds.

In much the same way, the prevalence of the 'Blue Boar' in Essex is connected with the fact that this was at once the crest, one of the supporters and a badge of the De Veres, who for centuries ruled much of Essex in semi-regal fashion from their headquarters at Castle Hedingham. The 'Eagle and Child' and the 'Eagle's Foot' are found not only in Lancashire, but elsewhere on the estates of the Stanleys, Earls of Derby, and John of Gaunt's 'Red Lion' is very common indeed all through the country, but especially on the present or former estates of the great Duchy of Lancaster. The 'Chequers' may or



By courtesy of Messrs Wethered

Since the recent revival of interest in inn signs, many excellent artists have painted signs for English inns: (opposite) the 'Doves' sign from the interesting old House in Hammersmith Mall, associated with many distinguished literary figures, including Thomson, author of *The Seasons*, who wrote part of his *Winter* there. It was painted by Mr N. Hepple in 1933. (Above) Village alehouse with the traditional English sign of the 'Royal Oak' at Borough Green, Marlow, Bucks. (Right) The 'Butchers' Arms' at Sheepscombe, near Stroud, Gloucestershire. The lower part of the sign displays the arms of the Worshipful Company of Butchers. Above is a butcher holding a pig on a rope by the leg, and a great two-handled mug of beer. The pig has twisted the rope around the butcher, who is in danger of losing either his pig or his beer



Edwin C. Peckham, by courtesy of Stroud Brewery

may not represent the charge in the arms of Warenne; it is certain enough that the 'White Lion' is often that which the Howards inherited from the Mowbrays. Similarly the 'Lion' is often a Percy badge. He appears in three different forms in the arms of the Dukes of Northumberland, a 'Blue Lion' *rampant*, a 'Blue Lion' *statant*, and a golden lion *guardant*, magnificently collared in blue and silver. Other similar badges which will occur to the reader having only a nodding acquaintance with heraldry are the 'Bear and Ragged Staff' of the Nevilles, the 'Dun Bull' of the Nevilles, the 'Green Dragon' of the Herberts, the 'Peacock' of the Manners, the 'Greyhound' of the Clintons, the 'Phoenix' of the Seymours and the 'Pelican' of the Pelhams. The typical Lancastrian badges, the 'Lion', the 'Swan', the 'Antelope', may be expected to occur most commonly either on Lancastrian estates, or on those of nobles who supported the House of Lancaster. The 'White Lion', the 'White Rose', the 'Black Bull', the 'Falcon and Fetterlock' and the 'White Boar' may be expected where there were strong Yorkist sympathies. Tudor and Stuart badges are found all over the country, the 'Dragon', the 'Unicorn', the Tudor 'Rose', are almost as common as the 'Rose and Crown', the 'Oak and Crown' and the 'Royal Oak'. Jacobite badges, too, are often found in unlikely places, if indeed the 'Raven', the 'Black Boy', etc., are usually to be interpreted in this sense, which, however, seems a trifle uncertain, as does the theory which would make the 'Punchbowl' in general a hall-mark of Whiggery.

Often local signs are to be explained by their existence as county badges. This is no doubt why the 'One and All' (the fifteen roundels) is favoured in Cornwall. Certainly it is true of the 'White Horse' in Kent, and of the 'Staffordshire Knot' in the county of Stafford.

But there are plenty of problems left. There are few 'Hop Poles' in London and, surprisingly, in Kent, but many in the midland districts now or formerly famed for hop-growing. Why, however, should the 'Blue Posts' be almost confined to the West End of London? There is nothing remarkable in the commonness of the 'Vulcan's Arms' and the 'Miners' Arms' in some parts of the Black Country and near Sheffield, in that of the 'Jolly Potters' in North Staffordshire, and in that of 'Ship' signs of various kinds along the whole of the coast. But, so far as I know, no one has explained why the 'Marquis of Granby' should be especially popular in Surrey, far from the main Manners

estates, why the 'Board' or 'Table' should rarely occur save in Durham, with a few instances in the neighbouring North Riding of Yorkshire and Northumberland. A friend who has spent many years in work among county muniments tells me that the 'board' sign is often referred to in the old alehouse recognizances, in Lancashire at any rate, as the description of an alehouse which had no other sign than a board (to say 'Alehouse'), but why should it occur only in the northern counties? Why at one time was the 'Thorn' or 'Thorn-tree' almost peculiar to Derbyshire? The 'Cornish Chough' occurs rarely except in the Duchy, and this is understandable enough, but it is curious that 'Blue' signs should be commoner in Lincolnshire than elsewhere, so that the county possesses 'Blue Dogs', 'Blue Pigs' and even 'Blue Men'. Along the main lines of the old coaching roads one finds, naturally enough, the 'Coach and Horses', the 'Flying Horse', the 'Express', the 'Tally Ho', etc., and along the early pack-horse routes one is not surprised to find the 'Packhorse', the 'Horse and Dorsers' (pack), etc. In the same way the old canals are marked by Houses having such titles as the 'Duke of Bridgewater', the 'Navigation', the 'Packet'. This is, of course, what one would expect, and one can understand also Yorkshire's taste for the 'Bay Horse' (the old Cleveland Bay—the noted breed of coach horse which developed locally), but why should Yorkshire also favour the 'Heifer' signs rarely found elsewhere, the 'Blacksmith's Arms' and the 'Brunswick'? The Davy Lamp in one form or another is used universally throughout the coalfields, but the 'Davy Lamp' sign rarely occurs except in Northumberland, and similarly the 'Anvil', the 'Smith' and the 'Smithy' are rare except near Sheffield, while the 'Forge', the 'Three Forges', etc., are not often found except in the midland iron districts. Why should the 'George' be a great favourite in Gloucestershire, the 'Cat and Fiddle' in Hampshire, the 'Case is Altered' and the 'Rose and Crown' in Hertfordshire and in some parts of Middlesex—there were at one time four inns of this name within six miles of Harrow—and the 'Green Man' in the Midlands? It is perhaps understandable that the 'Cricketer's Arms' should be found so often in Surrey and Hampshire, though, of course, odd examples of it are found everywhere, but why does Essex favour the 'Running Mare', the 'Rose and Crown' and, especially in those parts neighbouring the Thames Estuary, the 'Crooked Billet'?

Whence, too, did Cheshire obtain its taste for vivid, picturesque signs, some of which,



By courtesy of Messrs Mauldon

The fine 15th-century sign of the 'Swan' at Clare, Suffolk, is often described as the oldest inn sign in England. The arms are, on the left, of England and France; on the right, of Mortimer. The crowned swan is an allusion to the royal pretensions of Gilbert de Clare, c. 1314



Ernest Williams, by courtesy of Messrs Benskins

The 'Nags Head' at Bishop's Stortford, Hertfordshire, has a good modern sign by Eric Kennington. The panel represents the early history of Bishop's Stortford

unhappily, have disappeared in recent years: the 'Naked Child', the 'Romping Kitling' and the 'Comfortable Gill'?

I am at present engaged on a revision of Larwood's *History of Signboards*, and shall be glad to hear from readers who feel inclined to

make investigations upon these fascinating topics in their own areas. They will certainly find interest and pleasure in the quest, but it is fair to warn them that they may find themselves landed with an inquiry which will last them for the rest of their days,

Set Free

by H. M. ROLLESTON

In our July number Miss Rolleston described her experiences with the eighth expedition of Commander Gatti and his wife to the Ituri Forest in the Belgian Congo to capture live Okapi. In this article she gives a detailed account of how an okapi was captured by mistake during that expedition and afterwards set free

WE were debating whether or no the new store-house could have a concrete floor, with due consideration of the fact that no cement was obtainable in this remote corner of the Congo, when the forest men arrived. According to custom they waited, stationary shining black figures girt with a strip of bark-cloth, one with a spear, the other with bow and arrows.

"Well," said Commander Gatti, the *Bwana* (master), presently.

"*Okapi makuba indani zemu*," announced the head man, which being translated meant that a large okapi had fallen into a pit in the forest.

This information was not well received. The *Bwana* had decided to attempt the capture of no more grown okapis for the present and a neglected pit had betrayed him.

Question and answer passed swiftly. How old? How strong? How long in the pit?—and, with a final outburst of wrath, why had they been so long in coming to tell him?

There was no adequate reply to the last question.

"Look where we are," fumed the *Bwana*. "Three o'clock in the afternoon and that animal has been in the pit all night, and probably from the night before. Listen, Sanuni—I will not make a *matata* (row) if you tell me the truth—is the okapi there from this night or the night of yesterday?"

Sanuni protested that it was but one night, but the *Bwana* did not look reassured, and going to the verandah roared "*Kalowese*" in tones that shook the clearing.

Kalowese arrived at the double for he was an old soldier and the *capita* of the outside men; a fine-looking man in the blue fez and jersey over khaki shorts, which was the uniform of the house, his leather belt showing the amazingly slim waist of the Congo native. He was very gloomy at the *Bwana's* proposal that twenty men should go up at once and start the work of digging out the animal. Three o'clock now, they could not be there till five; it was dark at six.

"Beat the tomtom," said the *Bwana* inexorably, and the men assembled. A motley crew they were, black torsos and limbs with strips of bark-cloth; tattered shirts and no shorts; shorts and no shirts, sarongs draped or caught up.

They complained grievously. These Ituri villagers, who are a poor type physically, are notoriously lazy and the day's work was nearly at an end.

From my tent I watched the scene, and heard the *Bwana* offer a week's wage to each man if the okapi lived and was free by noon the next day. He called for volunteers but the crowd stood sullenly. Then a flood of impassioned language broke forth; the *Bwana* appealed with every tone of his golden voice, with every intimacy of expression that his understanding of the language and love of the Bantu gave him.

"What means it," he cried, "that I am a good *Bwana* to you if when my need is great you do not stand by me?"

The line bunched and broke up, the *Bwana* returned from a tactful scrutiny of the heavens to find the tried boys, the *zermani*, standing ready.

"A-a-a-ah, go, go quickly, take food and blankets, work while the day lasts, and I will be with you in the dawn."

Decision is the difficult thing for the Bantu, action thereafter is simple, and twenty minutes later a laughing, singing line passed through the palisade behind my tent, each carrying a blanket and the evening food. I heard their laughter and cries coming back through the forest, and then, last of all with flash of brown heels and wide grin of joy, rushed the garden *toto* (half-grown boy) who at the last moment had prevailed on the authorities to release him from his evening duties. Where there was any stir *Toto* wanted to be.

* * *

The *Bwana* and I started in the dawn. The grey tree-trunks round the clearing stood out against the blue mist of morning. The African partridge sounded its raucous pene-



(Top left) *The kitchen of a temporary camp in the remote Ituri forest. The light shines on the oblong Magongo leaves which serve every purpose for Bantu and pygmy—dinner-plate, sun hat, water vessel and thatch. (Top right) The head of the male okapi which was released from the pit. Note the giraffe-like neck and little horns, covered with thick fibrous skin. At the head of the pit stands the boy who has just washed the okapi's head. (Below) Commander Gatti holds a council. The Capita (head man) is well clothed as befits his station: if you work, you have white men's clothes; if you do not, you have tattered bark cloth as seen on the two men watching in front of the little house which the Gattis built for the author*



Photographs by the author

trating cry, and on the track the leaves closed round us cool and dim.

The hidden river talked to us awhile and then, leaving it, we forded frequent little streams clear as crystal over sandy beds. Often we walked some way in these streams following a course which avoided a huge group of trees or an impassable marsh. Greeny-grey moss straggled from the branches and great solid roots stood out like huge buttresses from the trunks.

We walked for the most part silently in

single file. Once or twice the Bwana spoke of the time when less than a year ago no human being had penetrated this jungle, and by much cajolery and judicious threatenings, the pygmies who are the natural inhabitants of the forest had been induced to come with him into the much-dreaded region and show him the tracks of the rare and shy okapi.

This section of the forest had been the subject of the greatest fear and superstition until he and his wife had broken into it together.

The sun was up now, striking through the

(Below) *The head of an okapi now in captivity in the Regent's Park Zoo. (Opposite) Toto, a young okapi captured by the Gatti expedition. He did not live long, and a post-mortem revealed that he was diseased when captured. The mother okapi makes a nest in a thicket of the deepest forest, has the calf there and leaves him protected till he is old enough to come out into the world with her. She leaves him for hours sometimes while she feeds and drinks and then returns to feed him. It was through her tracks that her hiding-place was found by the pygmies. Toto was brought in a sack to the clearing. From his eye it can be seen that he is aloof but not frightened. The stripes on flanks and legs are pure white, the coat deep chestnut. It was through seeing belts of this striped skin worn by pygmies at Fort M'Beni that Sir Harry Johnson realized there was an unknown animal still to be found in the Ituri Forest. This was about 1900, and for years the okapi was supposed to be very rare. It has now been established that though found only in this part of the Congo they are fairly numerous in parts of the forest*

Zoological Society of London



high branches; the magongo strong shining leaves with bronze backs which lined the path in marshy places became translucent in patches of sunlight.

"Markaka," said the boy in front, and suddenly the tree-tops were full of black monkeys swinging, clucking, hurling themselves with incredible lightness from tree to tree. In a valley were fresh elephant tracks, some of enormous size, others where a young one had run beside its mother.

"Half-way now," said the Bwana as we

climbed over huge tree-trunks lying across the track. Here the trees had put out aerial roots, great arches springing from high up in the trunks of enormous girth. We stopped for a minute to look at some of the ground roots, which, the same size as many of the smaller trunks around, thrust themselves over the track and disappeared into the forest, giving the impression of mammoth snakes in transit.

Then through the leaves pelted Toto, all eyes and teeth.



"*Apana kufa*," he announced with enormous pride.

"Not dead," echoed the Bwana in the vernacular; "what does he do?"

"*Malari kidoko*," reported Toto, indicating that the okapi had had about enough.

"Come on," said the Bwana, quickening his pace, and we went by a group of leaf huts where last year he had spent weeks watching, noting and photographing.

Now a waterfall began to speak through the trees and we came suddenly upon the clearing.

There was something unspeakably lovely about this place where only the Bwana and his helpers had been before. It emanated purity and calm as if it were sacred to the drink and bath of the delicate okapi and the fairylike gazelles of which the forest is full.

Upstream was a waterfall of some twenty feet, behind which the forest closed in again. Noble grey-stemmed trees reared up out of the scrub spreading wide branches, and the bell-bird of the forest chimed a solitary note at long intervals. The rough green weed that covered the clearing was speckled with little mauve flowers, and groups of a blue campani-ola type of plant grew high near the water.

There was no time to stop and rejoice in the remote beauty of the place; we went straight through the golden water sparkling in the sunshine, and up a hill on the other side, the forest closing heavily upon us after the brief sight of the sun; and here we came upon the pit. The men were close around it digging. A big slope was already cut at one end, and looking down I saw my first okapi; saw the long supple neck, the great fan-like ears, the beautiful sensitive muzzle and the exquisite fine lines of cheek and nose bones. He affected me as a thoroughbred horse does, all sensitiveness and power. Of the famous black-and-white stripes of flank and legs nothing could be seen, for the mud of the pit had covered them.

The Bwana began giving instructions to the men, and speaking horse talk to the okapi, who ceased the plunging he had begun at the stir of our arrival and watched the Bwana with a clear quiet eye. It was strange that this most remote of animals who almost certainly had never seen a man before, showed no fear or distress in his eyes, and struggled very little as the pickaxes and shovels worked so close to his head.

"Get water and wash his head, Masi-Mengo," said the Bwana to the boy working at the head of the pit. To be muddy was a great indignity for the okapi, who cannot endure a speck of mud on his coat and washes daily all over in the sparkling river of the

forest. Masi-Mengo fetched water in the inevitable petrol tin brought to the camp overnight, and very gently rubbed and washed the caking mud off the beautiful head. I was struck with the boy's look of compassion and kindness. The animal seemed to feel it, for he turned his head slightly to receive the water as a dog will lay his head in your hand.

"These boys are being trained," commented the Bwana. "Six months ago when I got the first one they were running up trees whenever he kicked, nothing would have made them touch him—just look at that—going to sleep if you will believe it."

Masi-Mengo withdrew his hand. The okapi, his head now free of mud, turned his long neck, laying his nose upon his flank as okapis do when sleeping, and sank for a moment or two in the mud of the pit. A few moments only, for the movement was one of instinctive relief, and the clatter of pick and shovel went on round him.

"How much longer do you think?" I asked. The sun was strong through the leaves, making marvellous light and shade on the dark bodies of the workers.

"A good hour," said the Bwana; but the work went quickly, and long before that time strong poles under the animal's hindquarters levered him up enough for him to scramble up the slope cut down into the pit by the boys.

"A-a-a-aa-ah," said they all, hurriedly falling back as he stood quivering and bewildered in the little clearing made by the trampling of the workers. Veterinary ropes had been fastened to his legs so that he could be held while we photographed him. After a few seconds he shook himself and sprang forward only to find that he was not free after all. In despair he threw himself on the ground making a long hollow grunting sound most rare to hear from the okapi.

"*E na kufa, e na kufa*" ("he dies, he dies"), chorused the boys. I turned away into the trees unable to watch the struggle.

"He will not die—he will not die," shouted the Bwana, "undo the ropes, get him up again." I did not turn again till the Bwana called that all was well and for a minute or two we watched him feel his freedom. There was no charge or fierceness about him. His mild beautiful eyes turned upon us quietly as he moved yard by yard, pausing to gather strength, through the flickering sunshine and green shadow, into his home the impenetrable forest.

"Go free—go free, you beauty," said the Bwana, clicking his camera for the last time as the okapi bowed his head beneath the branches. Then a cavern in the forest swallowed him up and he was gone.

The Congress of Vienna

by C. V. WEDGWOOD

As the hour approaches when the future of Europe and the world will once more be under settlement at a great after-war international conference, we are eager to scrutinize the conferences of the past, the ideas underlying their decisions and the reasons for their success or failure. In this article Miss C. V. Wedgwood makes a penetrating examination of the Congress at Vienna 130 years ago, from the point of view of the realities of political geography which faced it. She reveals the subtler discrepancies between these realities and the intellectual assumption of the statesmen who met them, and points out how nearly, in spite of this and many other adverse factors, the Congress succeeded in establishing changes by discussion as the principle of international relations—a principle which must still be the goal of all wise statesmanship

"THE city of Vienna at this moment presents an overwhelming spectacle; all the most illustrious personages in Europe are represented here." "This moment" was the last week of September 1814. Napoleon, defeated by the coalition of Russia, Prussia, Austria and Great Britain, had abdicated in May. His drastic disentanglement of the European frontiers was over and he himself out of harm's way—or so it seemed—on Elba.

Neither for the first nor the last time in Europe's history a new world was to be created in which international alliances and reformed frontiers would make wars impossible. Yet it would be wrong to look with cynicism on the Congress of Vienna, which met with such lofty hopes. It represented an advance on anything hitherto attempted. The consultations and treaties which had closed wars for the preceding three centuries had given scarcely more than lip-service, if that, to the cause of permanent peace. "Olives of endless age" were not in fact the object of the delegates who revised frontiers and exchanged territories in the intervals of hunting and dining at pleasant country seats or elegant cities from Cateau-Cambrésis in 1559 to Paris in 1763. Some might talk wishfully of lasting peace, but they planned the map with the strategy of the next war in view or even, cynically, with problematical frontiers to be used later as excuses for attack. The confused cession of Alsace to France in 1648 was described by one of its perpetrators as "*une sémence éternelle de guerre*". At the same peace conference another delegate remarked, "As I see it, each of us must be content to keep his claims and interpret the treaty how he will."

The Congress met at Vienna in 1814 in a new spirit, and although the dead past of Europe dragged heavily upon its delegates and laid its unmistakable mark on their final

decisions, it did at least initiate a period of frontier settlement by conference and not by war which was only to break down half a century later under Prussian onslaught.

The irony of it was that the Congress of Vienna was itself responsible for the consolidation of Prussia as a European power, the parvenu state being deliberately enlarged and strengthened as a counterpoise to France. This is the debit side of the Viennese account. The fateful error was committed because the statesmen of 1814, while in *theory* they looked forward to a Europe of international conferences, were still in *practice* men of the old 18th century, dominated by the ancient principle of the balance of power.

The continuity of human thought is not broken, although its course may be changed, by violent events. The French Revolution and the Napoleonic wars had shaken the European structure like an earthquake; frontiers had been swept up and redistributed, ideas had been unloosed in a torrent. Liberalism, Nationalism—the 19th century in fact—had been born. But the statesmen of Vienna, Castlereagh and Metternich, Talleyrand, Hardenberg and Nesselrode, had been born in the older world of the 18th century. Although all were aware of the new forces, and all recognized the opportunity for re-building a better Europe from the levelled ruins, yet all of them inevitably had for background the old Europe. Its absurd configuration and its long-standing dynastic quarrels were familiar to them, were indeed the unconscious furnishing of their minds. They could not but see the Napoleonic struggle as the last phase of the French problem.

Of the four allied victorious powers Austria, Russia, Prussia and Great Britain, Great Britain on account of her island situation was felt to be the most dispassionate judge in the problems of Europe. But although the Eng-



Prints from Rischgitz Studios

The three outstanding statesmen of the Vienna Congress: Castlereagh (centre), Talleyrand (left), and Metternich (right). Below is Isobey's famous picture of the assembled Congress. The Duke of Wellington is the extreme left-hand figure. Metternich stands almost next to him, pointing with his left hand to Castlereagh, who half lies in his chair with his legs crossed. Talleyrand sits with his arm on the table to the right. Neesselrode stands behind Metternich's left hand and Hardenberg is the spaulleted figure in the left foreground. Five of the 'illustrious personages' portrayed here were representing Great Britain, four France, three Russia, three Portugal, two Austria, two Prussia, one Spain and one Sweden

lish attitude lacked the embitterment which arises from possessing threatened frontiers on dry land, it was nevertheless deeply affected by the theory of the balance of power. During the three centuries in which she had been a power in Europe her statesmen had striven to maintain that balance; there had been a few deplorable interludes, when under Bloody Mary England had been a satellite of Spain, and under Charles II, of France. But submission did not come naturally to her—

For Britain is
A world by itself; and we will nothing pay
For wearing our own noses.

Thus in general England was to be found ranged against any power which strove to dominate Europe, in the 16th and 17th centuries against Spain, in the 17th and 18th against France. This latter quarrel had been intensified by the competitive growth of the British and French Empires and had been pursued with unflagging vigour in three continents. To Great Britain therefore more than to any other European nation the Napoleonic wars were but the last of a continuous series, and the problem to be solved at Vienna was that same French problem with which her statesmen had been wrestling for seven generations.

The same idea was present in the minds of the statesmen of other nations, but in none can it have been so strong as among the English. Not that it went, in those more civilized times, with any emotional animosity against the French: it was merely a statesmanlike determination to settle the French problem. Just as today for some of us the problem seems to be a fundamental question affecting the whole political organization of the world, while to others it is the old German problem in a more virulent form, so it was with them. Each point of view—both then and now—is on its own level correct: the essential is to solve both. Vienna solved one only.

In order to understand what was done at Vienna and why, there is no better way than to consider three versions of the European map: before the Napoleonic wars, at the height of Napoleon's power and after the settlement of Vienna. The close resemblance between the first and the third show how little even a political earthquake can achieve in breaking the shackles of tradition. But they also show that there are human forces stronger than reason, sometimes even stronger than self-interest. No map can be successfully redrawn without consulting these.

The extravagant unreasonableness of European frontiers in the last decade of the 18th century had been produced by twelve cen-

turies of change. First came tribal movements and tribal wars, then the gradual settling of peoples and languages, then the consolidation of dynastic powers; the ambition of ruling families, the vigour of individuals and groups, the conscious determination to round off a grotesquely misshapen frontier or to secure a strategic salient had come later. The origins had been unco-ordinated and unplanned, the changes of later times were directed to the advantage of single rulers or a single group, and the result was the vivid and perilous confusion that we still know. It is the problem of European statesmen that this historic map is the foundation of all new planning; it must be accepted and made serviceable, for to disregard it—as impatience or genius is apt to do—is to disregard interests and passions and cultures which have grown out of it and which are vigorous enough to sap the bases of any European scheme which disregards them.

By the closing years of the 18th century the worst confusion prevailed in the Italian peninsula, and in the state officially known as the Holy Roman Empire and unofficially as Germany. Political geography was, for obvious reasons, less complex in countries with a long sea-coast. England was exactly, Spain and Portugal very much the same as today. France's problems were all on her eastern border. Finland belonged to Sweden, so did a sizable strip of Pomerania including Stralsund. This Swedish-controlled piece of Germany was technically under the suzerainty of the Holy Roman Emperor. The same fiction held good for Holstein, in reality a part of Denmark but in name a fief of the Emperor and thus still technically 'German'. The King of Denmark and Duke of Holstein was also, for full measure, King of Norway.

In the heart of France a minute enclave round Avignon belonged to the Pope. The French eastern frontier had been for the last two centuries steadily reaching out for the Meuse, the Moselle and the Rhine. Artois, Cambrésis, portions of Hainault and of Flanders had been annexed from the Netherlands, Franche-Comté, the Sundgau and Alsace had been ceded by the defeated Austrian Habsburg to Louis XIV, Lorraine had been acquired by Louis XV, so that France now jutted a determined salient into the rotting fabric of the Holy Roman Empire.

This Empire was the legal name for a country which had no corporate existence as 'Germany'. There were about 600 separate states—whether principalities, duchies, bishoprics or free cities—within its boundaries. Recognizable as states of European importance were Austria, Bavaria, Prussia and



Stanford, London

(Above) I. Europe in the closing years of the 18th century. Notice the confusion of states in Italy and the Holy Roman Empire



(Left) II. Europe at the height of Napoleonic power, showing the extent of the new French Empire and the simplification of the German and Italian map

(Opposite) III. Europe after the Congress of Vienna; notice the resemblance between this and the first map



Stanford, London

Saxony, while Baden, Hesse, Württemberg and Mecklenburg were large principalities. The tangle of rights and frontiers was fantastic. Apart from Holstein belonging to Denmark and Pomerania to Sweden, Hanover of course belonged to England. Three foreign nations thus had a stake within the Empire; but to balance this both Austria and Prussia had even larger possessions outside it. The whole of 'Prussia', properly speaking, was outside the Empire, and it was only the original possession of the Hohenzollern dynasty, the Mark of Brandenburg with its capital at Berlin, which was within the Empire. Of recent years the King of Prussia had devoured a third part of Poland, as far as the Niemen and the Bug, and including Warsaw. Austria however remained the dominant power both within the Empire and in central Europe; the Archduke of Austria was (and had been for some centuries) Holy Roman Emperor. He maintained his prestige by means of wide possessions further afield. He was King of Hungary and Bohemia, and Count of Tyrol, master of the Austrian Netherlands (which we call Belgium), Grand Duke of Tuscany, Duke of Milan, Modena and Mantua. Southern Poland, in-

cluding Cracow and Lwow, had been annexed and most of Croatia acquired from the now decaying Turkish Empire.

Italy, like Germany, was a geographical expression. The southern half with Sicily formed the Kingdom of the Two Sicilies, with capitals at Naples and Palermo, and a minute papal enclave at Benevento. Central Italy from coast to coast formed the States of the Church, with, on its western frontier, the Austrian lands already mentioned. In the north were the maritime republics of Genoa and Venice, the latter controlling stretches of the Dalmatian coast, Istria and the Ionian islands. Furthest north of all, astride the Alps and bordering on France and Switzerland, lay the Duchy of Savoy whose ruler styled himself King of Sardinia since he had acquired that island. In the midst of Europe sat Switzerland secure among her mountains.

Such then was the bewildering face of Europe in the last years of the 18th century. Small wonder that these fantastic evidences of individual aggression and dynastic greed exasperated the revolutionaries of France, who believed in Reason and the People. If, in the revealing perspective of history, this was to be only the last of France's

wars for the control of Europe, it had felt like something different and greater to that glorious rabble, the victors of Valmy.

But the revolutionaries did not re-draw the frontiers. It was Napoleon who imposed on defeated Europe more intelligible divisions, and with them a torrent of dynasts—his brothers and his marshals. By 1811 France dominated Europe from the Spanish peninsula to the Elbe, and in some places, beyond. The entire Netherlands—after a brief experimental period under Louis Bonaparte—had been incorporated in France proper. So had Switzerland south of the Rhine, a great part of Savoy, Rome itself, Tuscany and Genoa; so also, under the magical name of Illyria, the Dalmatian coast, Croatia, Carniola and Carinthia. The satellite states included the Swiss Confederation, the Confederation of the Rhine (Westphalia, Saxony, Bavaria, Württemberg, Mecklenburg), the kingdoms of Naples and of Italy (including Venice, Milan and part of the States of the Church), and the Grand Duchy of Warsaw—which was all Napoleon had vouchsafed as a reward to his Polish allies struggling for the redemption of their country.

Outside the Napoleonic New Order were the remnants of Prussia (its Polish possessions and everything west of the Elbe torn away), a baffled Austria (the Italian duchies, Tyrol, Carinthia and Carniola gone, and a daughter of the proud dynasty actually married to the Corsican upstart), Great Britain, Portugal, Denmark and Sweden.

But the French onrush had released the very forces which were at last to drive it back. Nationalism was the child of the Revolution. Whatever doctrines of equality the French conquests brought, however brilliant the simplification of the European map, the 'people', the 'nations', at last fully awakened, would not submit to French control. Nationalism was the blood transfusion which lent to the faltering monarchies the strength to overthrow Napoleon. Nationalism was the motive power behind the political and military coalition of Great Britain, Austria, Prussia and Russia.

The intolerable hegemony of a single nation—the one political solution which Europe has always rejected—was thus broken. The map of 1811 was rubbed out. How closely was the old map to be re-drawn, how much altered? That was the problem before the statesmen at Vienna in those autumn days one hundred and thirty years ago.

The situation was only in part a parallel to our own. Not only was there little moral indignation against France, but there was the legitimist Bourbon monarchy in exile, ready

to be substituted for the Napoleonic government. There was no question of penalizing the restored Bourbons for the aggressions of Napoleon.

The Congress opened at Vienna on the basis of a treaty signed in the previous May in Paris. By this France was to have her pre-war frontiers in Europe together with certain minor consolidations. Papal Avignon belonged henceforward to France; Annecy and Chambéry were to round off the frontier against Savoy. Austria even agreed finally to forego her ancient claim on Alsace. In return for this admittedly generous treatment the French government were to accept without consultation whatever redistribution of the European frontiers the allied powers should decide at Vienna.

Who were these statesmen and what powers did they represent? There were first the four great victorious powers: Great Britain, Austria, Russia and Prussia; then four lesser powers: Sweden, Spain, Portugal and defeated France; and besides these a mass of minor states: Holland, Naples, Savoy, the German principalities, the disinherited Poles, the Swiss Confederation, Denmark. It was no easy matter to decide even on a method of procedure with so vast a mass of business to be transacted and so many interests to consult.

To the uninitiated eye it seemed at first that the delegates spent most of their time amusing themselves. Even Vienna surpassed itself for the occasion and the impoverished Emperor did the honours of his capital with a luxury and generosity unparalleled in its history. "Congress dances," wrote an impatient diplomat, "but it does not advance." He was wrong, for in a surprisingly short time procedure was settled and business begun. There were to be—as at how many conferences since?—committees appointed to examine specific problems; these were to report to a central Committee of the Eight chief powers, which in fact turned out to be a working Committee of Five—the four victorious allies and France.

Among the many names of diplomats and secretaries, rulers and ministers, a few only stand out. Most striking perhaps was the Tsar Alexander, autocrat and idealist, whose lofty visions of a peaceful Europe led to the formation of the Holy Alliance, but whose fervid concern with Russian interests also very nearly brought war between the allies before the Congress closed. Alexander's romantic figure dwarfs that of the patient, hard-working pessimistic Emperor Franz (he had dropped the title of Holy Roman Emperor in 1801 and now styled himself Emperor of Austria). The King of Prussia was an arro-

gant nonentity, more prominent at balls and fêtes than at serious discussions. His minister, Count Hardenberg, on the other hand, was far-seeing and tenacious in the interests of his country.

But the three who tower above all the rest for insight and ability were Austria's Metternich, France's Talleyrand and England's Castlereagh. If Tsar Alexander stands out as one of the great *illusionnés* of history, these three, each in his own way, were protagonists of enlightened disillusion. They worked brilliantly but within the limits of a clearly conceived realism. It is as impossible to imagine any of them transgressing those limits as it is to imagine any of them—like Tsar Alexander before the Congress ended—in tears of abject contrition at the feet of an elderly female mystic. Madame Krüdener belongs to the marginal notes of history, and it needed the shock of Napoleon's return from Elba to precipitate Alexander into her power. Fortunately that shock did not otherwise greatly modify what had been decided at Vienna. The European settlement was all but completed before Napoleon landed, and the final act was signed on June 9, 1815, just nine days before the battle of Waterloo. Subsequent modifications were slight, for the victory established the preponderance of Great Britain and Castlereagh stood for the maintenance of the agreed settlement and was lightning swift to prevent either Prussia or Russia from using Napoleon's return and defeat as an excuse for penalizing France in their own interests.

The word on Castlereagh's lips throughout was a "just equilibrium", and if to secure this he made the lamentable mistake of enlarging Prussia, it must be remembered too that he prevented both Prussia and Russia from over-setting the balance from the start.

His plan, which in its large outline was the plan finally imposed, was to set up a strengthened German Confederation which would no longer be an open temptation to her neighbours, and to make Prussia the guardian both of the Rhine and the Vistula, thus holding in check the westward thrust of Russia and the eastward thrust of France. Austria was cast for the chief part in the German Confederation, now reduced to thirty-four sovereign states and four free cities. Saxony, reduced in size—its ruler had supported Napoleon somewhat too long—was to act as a buffer between Austria and Prussia. A further brake on Prussia was supposed to be exerted by the re-union of the southern (Austrian) Netherlands with the independent North (Holland) in a single state. In vain the Prussian minister Hardenberg argued that

the entire Netherlands should be included in the German Confederation; the other allies preferred a strong and independent state to control the mouth of the Rhine. Prussia, they felt, had gained as much influence as she could safely be allowed when she was given the provinces controlling its middle waters.

The real miscalculation, however, was over Austria. Theoretically strengthened by being given not only her old possessions in Italy but Venice and the Dalmatian coast, she was in fact weakened. The ferment of nationalism in Italy made her tenure expensive and insecure and the struggle to maintain Austrian dominion in the south drew her interests away from Germany proper. During the next half century the balance of power in central Europe broke down alike because of Austria's increasing weakness and Prussia's growing strength.

At Vienna Russia, rather than Prussia, seemed to menace the "just equilibrium", but in fact Russia for the time being came little further into Europe. She regained her share of slaughtered Poland with the addition of much that had been Prussia's and Austria's; she kept Finland, conquered from Sweden in 1809.

Sweden, constrained to yield the Pomeranian coast to Prussia, was consoled by the annexation from Denmark of an unconsulted and unwilling Norway. The Sicilian Kingdom and the Papal States reappeared on the Italian map. England, by way of maintaining her police of the seas, acquired Malta, Heligoland and the Ionian Islands.

The settlement was conservative. The theory of the balance of power had been vindicated, and tradition and dynastic power had won an easy victory over the still unco-ordinated forces of nationalism. Poland had been dispersed, Norway and Finland disposed of like chattels; only after years of struggle would Italy and in due course Bohemia and Hungary and the Southern Slavs disintegrate the Austrian Empire from within.

Yet, compared to all previous European settlements, it was constructive and workable. If the frontiers it imposed were some of them impermanent, if it avoided or shelved many individual problems, it had nevertheless foreshadowed a method of maintaining peace by discussion. Not for fifty years did Prussia begin on her programme of forceful change, not for a century was there a major European war. Limited as were its solutions, timid as was much of its policy, the Congress of Vienna marks an advance in European treaty-making. Frontier revision by argument and peace by discussion—so nearly achieved in the 19th century—should surely not be beyond the capacity of the 20th.

Palaces of Steam

by WILLIAM SANSON

OF all the moribund Victorian palaces—the palaces of insurance, of lunacy, of education, of salvation—none is more imposing than the great Railway Terminus, the Palace of Steam. Those were expansive days, steam was unquestionably a monarch, and consequently from its royal coffers the iron wealth poured out to celebrate itself in some truly monumental feats of masonry. In London alone we see still the relics of Euston, Paddington, St Pancras, King's Cross and other glorious capitals of a new empire upon which the soot forever sets.

Nowadays they must lay claim to our attention for many reasons. First for their Victorian charm. Again, because they are still there at all—for a great railway station is a first-class objective of aerial attack. Again, because a railway terminus is so strongly associated with the departing soldier. And lastly because the great arched roof, the impatient engines, the luggage, the crates, the crowd, the busy porters all evoke so many memories of past holidays and the 'excitements and anticipations of our first journeys. Few of us remain unmoved by the pungent, dusty, meaty smell of funnel smoke, or the lighter metallic odour of the coffee urns in those wonderful refreshment rooms, or the bright arc of sunlight at the outward end of the platform: these and the engine puffing so far away out at the end of the platform have become symbols of freedom, of going away, of change. Though now, alas, the high glass roofs are often glassless, the lights are dim and blue, the crowds wear khaki and must sweat blood, toil and tears beneath a welter of rifles, kitbags and embraces.

Yet, these are the same stations that during other wars saw the scarlet and the shako. The great Doric arch at Euston, for instance, was erected as long ago as 1837. Then it was the "eighth wonder of the world" and stood isolated and uncluttered by surrounding buildings, a magnificent gateway to the north. Nevertheless, it was never much more than a façade, and beyond the splendid portico there was no Doric station—only a humble series of wooden platforms (then called 'parades') and the low glass and ironwork roofs of the sheds which are still in use today.

Curiously, the magnificence of the portico is repeated a mile or more up the line. In a deep cutting at Chalk Farm another immense arch (though not Doric) decorates the entrance to the first tunnel. Today this is blackened, hidden from the road, forgotten, yet it is a tremendous edifice, crowned by masses of stone that would have done justice to a royal palace.

At Chalk Farm too stands the original round engine-house of the London and Birmingham Railway—an immense round building with a queer, flattened, cone-shaped roof that was once a well-known landmark. In the first days trains leaving Euston had to be dragged up the gradient as far as Chalk Farm by the 'endless rope'. Only then could the engines proceed under their own steam. Two towering chimney-stacks rose from the new engine-house of the endless-rope steam winches—and a neighbouring public-house illustrates for us the contemporary interest in these miracles by advertising that a good view of the gigantic towers can be obtained from its windows.

Euston's great propylæum has been obscured by the later buildings that have crowded around it. Its £35,000 worth of white stone has been blackened like the lake-painted engines of the line. But it still stands its ground and symbolizes the solid and unremitting character of all things connected with Euston Station. In the huge waiting hall, with its high ceiling decorated in the richest Victorian manner, there rises a grand double-tiered staircase worthy of a ballroom: but here again the heavy all-powerful locomotive atmosphere has asserted itself—for the stairway carries no delicate filigree banister but instead a heavy big-knobbed black iron railing that *means business*. At its base stands a white marble statue of Stephenson. The walls are half-panelled brown. Outside, the labyrinths of the ticket offices and cloak-rooms and goods offices are brown grimed black with soot and coal dust. The platform sheds are low-roofed and heavily girdered. Throughout this heavy brownish-blackish air Euston means business. It is the heavy-weight of the termini.

Nearby stand its twin northern brothers—



By courtesy of the L.M.S.

(Above) *The Doric arch at Euston, once the 'Gateway to the North'. Now this fine prospect is blackened and almost entirely hidden by an overgrowth of late Victorian hotels. (Below) The shareholders' meeting room at Euston. Massive marble pillars, ponderous ironwork, dark brown paint are the solid textures of this heavyweight terminus*

King's Cross and St Pancras. King's Cross, erected in 1851 on the site of a smallpox hospital, has a pleasant twin-arched façade that once implied simply and efficiently its purpose—although in fact it was copied from a building of a very different functional nature, the Riding School of the Russian Tsar. The façade still stands, but new buildings have spawned across its prospect.

But even the Riding School of the Tsar of All the Russias is dwarfed by St Pancras of All the Towers and Turrets. This large, red Gothic extravaganza derives from plans originally intended by Sir Gilbert Scott for a new Law Court in the Strand. Its windows are numberless—Gothic, Italianate, Moorish—ranged tier upon tier up to a roof decorated with a profusion of angular Gothic towers and turrets. These nightmare festivities continue within: the Gothic panelled booking-office has the stern air of a private chapel: in the great shed itself more red tiles and floral ironwork decorate walls that support the amazing span of its one great arch. The girders of this arch are slender and curved to form a dome of that peculiar stiff grace that has distinguished so many of the grander Victorian exploits in glass and iron. But fussy old St Pancras is big enough to be dignified, and its old wooden platforms, lit by shafts of sunlight shining through its distant filigree of iron archwork, still thump out the tread of romance.

The railways were always romantic. They appear doubly so in retrospect. At the



By courtesy of the L.M.S.



Bill Brandt

beginning of Queen Victoria's reign they were both the wonder and the terror of the day. The first London railway predated Victoria's reign by one year. For the first time for hundreds of years the roads had found a rival. Such noble engineering feats as the viaducts, the embankments, the tunnels and the great abysmal cuttings equally astounded and scandalized the top-hats and the bonnets. The transition from coach to rail was direct and the horse-coach was consequently registered in the design of the new rail-coach,

which was built and painted like so many four-seater coaches welded together. Even today a trace of this seems to remain in a curved decoration to be seen on many modern railway carriage doors, and in the tendency for railway vernacular still to refer to the carriages as 'coaches'.

Now, for us looking back, those were the days when brakesmen riding outside might be found frozen dead at the end of the journey; when tickets were copper discs; when stations might bear the names of taverns such

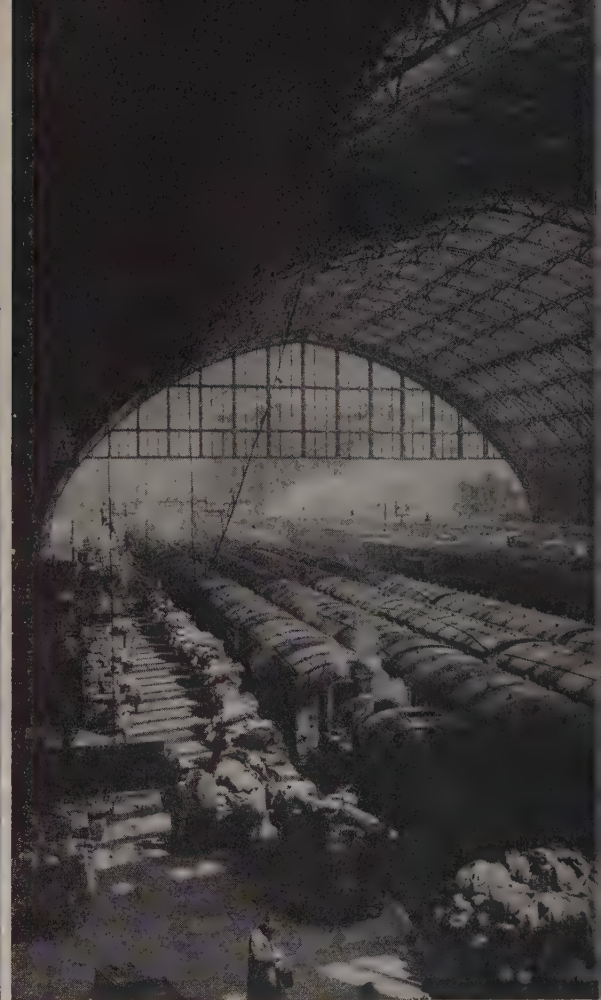


By courtesy of the L.N.E.R.

(Opposite) Morning at King's Cross today. (Above) On October 11, 1852, King's Cross Station was opened. Even then, contemporary criticism praised its functional simplicity; (below) the single arches of mid-Victorian iron inside King's Cross. This great ferro-rubric hothouse was a greenish blaze of gaslight from the many lamps ranging its walls



By courtesy of the L.N.E.R.



Bill Brandt

By courtesy of the L.M.S.



(Top, left) *St Pancras* of the towers and turrets: the huge red hotel serves a comparatively humble terminus; (top, right) morning at modern *St Pancras*. (Left) *The Railways* are paternally festive. *St Pancras's* severe Gothic ticket-hall hung with Christmas trimmings like any other Victorian severity relaxed for the season, at Christmas 1936

as the Bricklayer's Arms, the Dartmouth Arms (Forest Hill) and Jolly Sailors (Norwood); when Kingston-on-Thames was called Kingston-on-Railway; when carriages wore such gay colours as salmon pink and engines might be painted bright yellow; when there were such innovations as papier mâché carriages, engines run not by steam but by 'atmospheric pressure', and the 'endless rope' railways like the old Commercial, which dared not use steam for fear of the cinders setting fire to the surrounding densely populated district; when railways bore such resplendent titles as 'The East and West India Docks and Birmingham Junction Railway'; and those were the days when the Queen had her private station on the Wandsworth Road and royalty travelled in a fabulous coach especially quilted to deaden the sounds of the rough iron train.

The arrival of royalty was a red-letter day for the Terminus and that austere top-hatted 'personage', the Station Master. The entire Terminus said it with evergreen, flowers, flags and red carpets. Festoons of greenery were coiled round the girders, banners draped the walls, rosebuds scattered the promenade (platform). The halls and passages were glad with uniforms and bright dresses. The Station Master was there in his top-hat—and at least one Director, we may be sure, in his.

Although royalty were at first discouraged from travelling on the perilous rails, King William IV, Queen Victoria, the Prince Consort and others of noble blood all bestowed upon the new miracle an enthusiastic patronage. A sentimental echo of this interest can be seen on the brass plate beneath the stuffed body of 'Tim', the Terminus hound of Paddington. Tim, whose eyes still regard his customers with a state of undying servitude over a jowl as grim as a sergeant-major's, used to collect coppers for the Railway's Servants' Widows and Orphans Fund. It says on the plaque, "This dog . . . was on several occasions patronized by His Majesty King Edward VII and by the late Queen Victoria". Patronized? Patted? But Tim has already collected £800—dead, he continues.

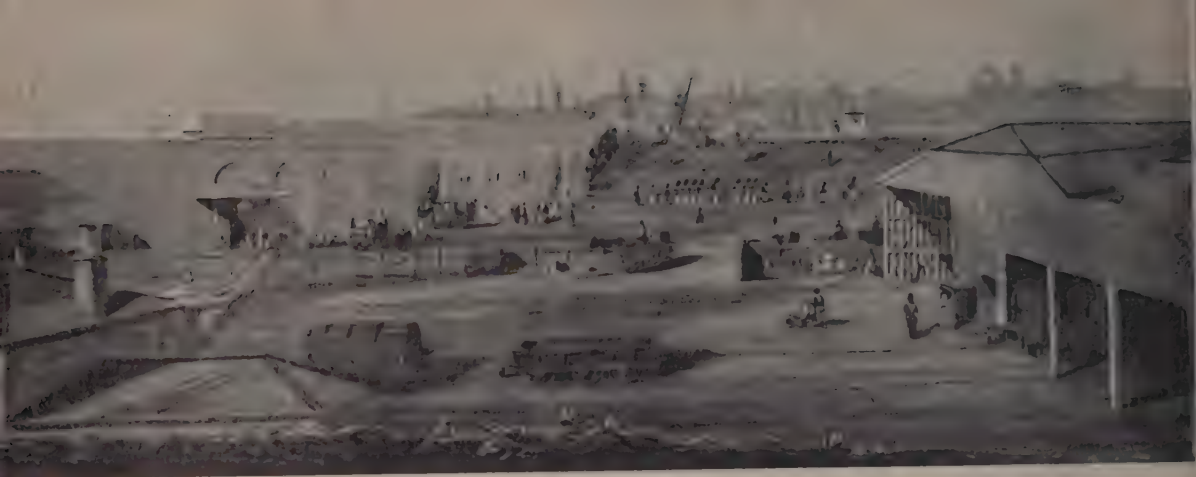
So in a roundabout way we come to Paddington, the great western terminus, whose present building dates from 1854. The Hotel, a sedate Italianate palace, provides the façade, and behind this stretch out the four marvellous great arches designed by Brunel. Here again is the sensation of a vast private welkin of delicate iron and crystal reminiscent of the Great Exhibition building

itself. An arabesque tendency has inspired the yellow-painted ironwork and other decorations—but the feeling of the great arches is more of a cathedral than a mosque. It is a place of grandeur and munificence, and the Queen's weather must have assumed a saintly aspect when its sun shone, as it sometimes shines today, in long cool shafts through the remote glass roof down to those echoing platforms below.

Then there are the other termini—Victoria, Charing Cross, Liverpool Street, Cannon Street, stations fronted by mid-Victorian hotel buildings. Cannon Street and Charing Cross are best viewed from the south side of the river, from where one can obtain a good impression of the size of the two stately mouths debouching trains straight onto the Thames bridges and the southern journey. There is the more modern Waterloo, with a 'Khartoum' station, today the largest of all London's termini. It was originally built as a substitute for the early Nine Elms terminus, now an important goods station, with its pleasing five-arched renaissance façade. And the lesser fry—Holborn Viaduct built on part of the site of the notorious Fleet Prison, many-arched Fenchurch Street, Broad Street, and the Bricklayer's Arms whose decorated façade and clock-tower have now unhappily been reduced by fire. Lastly London Bridge, the earliest of London's stations, the first terminus of the first London railway—the original London and Greenwich of 1836. Part of an early building in the classical style remains here today: but the earlier sheds have long since disappeared.

The hours many of us have to spend on these stations! The hours devoted to the press and the kiosk—when so much romance surrounds us, dimmed by our impatience and a drabbing of soot. I know this only too well, who have spent many valuable hours of leave in revisiting these stations for the sake of this article: revisiting with a different eye the same platforms on which I have whiled away, in exasperated ignorance, what must amount to whole days of waiting. In future, then, I shall tug less fiercely at my pipe, breath in the station smoke more strongly, conjure up the crinoline, dream of the parade that once graced these same platforms beneath these same enchanting girders, in the days when a railway journey was an occasion and the great terminus a more respected palace of steam.

I shall glow with regard for those rich, worthy, hopeful pioneers of old who wrote in stone above the Paddington gateway: *Domine Dirige Nos Virtute Et Industria*.





Opposite, top) Yards and sheds of the first Paddington Station, 1838. The original arches have fallen to become Bishop's Road bridge, but the sheds on the right rose in 1854 to the grand dome which roofs the present platforms; (bottom) Tim, the stern hospitaller of Edwardian Paddington. Above, right) The aroque gateway to Europe at Victoria; left) the cabyard of Victorian Victoria, with its wooden palings (like the fretted wooden canopies of so many wayside stations) and its intricacy of horse and harness. (Right) Still in harness today

Bill Brandt



Settling in the Dominions

by GEORGE G. LOOKER

Emigration within the Empire is a subject of widespread interest in this country today—as the response from readers to an article on 'A Post-War Farm in Kenya' which appeared in our May number showed. In the present article Mr Looker, discussing conditions in the Dominions, asks and answers some fundamental questions for prospective British settlers there after the war

WHY do people want to leave England, Scotland, Wales or Ireland for the Dominions—for Canada, New Zealand, South Africa or Australia?

One thing seems fairly certain. Men and women of the British Isles do not as a rule leave their own country for patriotic reasons. If they do leave it, it is not because they are convinced that increased populations in the Dominions are essential for the preservation of the British Commonwealth and Empire as a whole, nor because they feel that the particular Dominion to which they intend migrating requires additional people for its own defence against possible aggressors. If there are people willing to shift their ground purely for such motives, they are few in number. There are some, and they are farsighted, who urge others to take such a step and establish conditions which will encourage a substantial and steady flow of migration.

But the motives for migration, the reasons that decide actual movements of population from one country to another for the purpose of permanent residence, are much more materialistic, much more selfish. It is good to bear this in mind.

People leave Britain to settle in the Dominions either because they are pushed out of Britain or because they are attracted away from Britain. It is either the compulsion of poverty, unemployment or other unfortunate circumstances, or it is the attraction of a fuller economic and social life. The line dividing the two groups is often blurred but these are the two main causes of migration. The one arises from dissatisfaction, the desire to escape. The other is more positive. It is a determination, despite satisfactory conditions at home, to leave for a certain country for more or less definite reasons. It is more selective. It may be a desire for adventure, to experience, for instance, the thrills of shooting the rapids in Canada, or surfing on one of Sydney's ocean beaches, or the deep-sea fishing to be found off the New Zealand coast; or because the thought of South Africa's diamond and gold mines has stirred the

blood. In most cases this kind of attraction forms but a small part of something more fundamental. And the more fundamental is, normally, something economic. The Dominions may be offering better opportunities for employment, better opportunities for fuller and more constant employment—the attraction of a country holding out something positive in the way of jobs, living conditions and general environment.

It follows that the nature of the Dominion itself—the presence or absence of economic prosperity, the social and political framework, the climate, and the general outlook and living conditions of the people—will determine the type and number of migrants who consider permanent settlement.

* * *

Do the Dominions offer attractions? And if they do hold out prospects of a brighter future, to what kind of people would these prospects appeal?

It would be wrong to say they always have been attractive in this sense and have therefore always had a healthy flow of immigrants. During the gold-rush days the Australian population rose from a little over 190,000 to well over one million in the twenty years between 1840 and 1860. Immigrants came in their tens and hundreds of thousands. But there was a quite definite attraction—gold. During the depression between the wars the picture was vastly different. In some years more people were leaving Australia than entering. In short, whereas at one time there was economic opportunity, during the depression the reverse was true. And to say that from now on the Dominions will always be economically prosperous would be far too risky a prophecy. What we must view are the immediate post-war years. If these are to be prosperous, then migration will follow prosperity and it is post-war migration we are thinking about.

There seems no reason to doubt that the Dominions, in certain fields at any rate, will offer greater scope to the enterprising. This is not saying that success will come easily. All South Africans are not rich and flourish—

ing; nor are Canadians; nor New Zealanders; nor Australians. And they have had a fair start on newcomers. It is the overall picture that is full of promise. All the Dominions are growing and growing rapidly. The war has meant phenomenal development in the field of industry and the Dominions have every intention of fostering, within the limits of sound economics, the industries made necessary by the extent of the present world conflict. These industries are, in many respects, new and sometimes hardly more than experimental. Some will undoubtedly flourish, others will be unable to stand the pace of world competition and, unless the Dominions try to encourage their continued existence by high protective tariffs, these uneconomic industries will disappear.

But the total picture is vigorous. Few manufacturing concerns will be burdened with out-dated plants, with owners reluctant or unable to write off the loss. Most technicians will be fresh to new industries, learning from older-established countries and starting just where progress happens to be at that moment. Therefore, it is not unreasonable to assert that the Dominions have a promising future and will offer economic attractions for many of the men and women of Britain.

There will be disappointments and failures. That is inevitable. Some will be due to inherent laziness on the part of some of the migrants themselves; some to stupid and baseless hopes of a quick and early fortune; others will result from the lack of world adjustment to the changes which will inevitably follow the coming of peace; others again will be due to ill-considered policy on the part of the Dominions themselves.

What of the general social and political background?

First the composition of the people. It is good for the emigrant from Britain to realise what kind of people and what type of civilization he should expect to meet.

In Canada forty-nine per cent of the population is of British stock: thirty per cent is French-Canadian. Australia and New Zealand are predominantly British, a fact of which they are very proud. The Union of South Africa's white population is divided between Afrikaans-speaking and English-speaking South Africans—with the former in a slight majority.

It is advisable to remember one important thing. The people of British origin in all these Dominions must not be thought of as just British people in exile. There was a time when they regarded themselves as such and that thought still lingers with some. Indeed

most of these people of British origin continue to speak of Britain as 'Home' and many of the customs, suited only to the environment in the British Isles, are practised with surprising fervour. In Australia, for example, there is still a tendency to celebrate Christmas as if December 25 fell in the middle of an unpleasantly cold winter. But these habits of mind are dying, perhaps very slowly. Each Dominion is beginning to appreciate that it has a contribution to make to the world, a contribution only possible if it finds itself and ceases to imitate. It may be that Australians, New Zealanders, South Africans and Canadians are too conscious of this development. They might express their determination and convictions too loudly. But that there is this growth there can be no question. And when a possible migrant is contemplating making a new home in one of the Dominions it would be wise for him to remember that he is thinking of settling among Canadians, New Zealanders, Australians or South Africans, and not with Englishmen, Scots, Welshmen or Irishmen abroad. The migrant will, in a sense, be living with all these people. But, while they have carried their habits and forms of thought and institutions with them, they have, over a period of years, been moulded and changed by the environment in which they now live. The first settlers in Australia hated the land. It was so un-English. The seasons, the trees—in fact everything—refused to conform to the English



E. O. Hoppe

Many Australian trees are, as early British settlers complained, so 'un-English'. The Yucca, or Grass Tree, found in the Adelaide district of South Australia



New Zealand Department of Internal Affairs

(Left) Life on a New Zealand farm might sometimes mean hard work, but it is very healthy. Settlers in the Nelson hill country. (Below) Men—and women—have always been willing to leave the comforts of the big cities, push into the interior or to the north and open up new land for settlement: a settler's cabin in northern Saskatchewan. (Opposite, top) Canada has sent to Britain vast quantities of butter and cheese during the war: cutting cheese curd after it has been malted in the vat; (bottom) One of the many centres in Canada to which surrounding dairy farmers bring their supplies





By courtesy of the National Film Board



type. Everything was wrong. The landscape was hard, the sun unrelenting. And, most inconvenient and uncomfortable of all, they were thousands of miles from home. Gradually there was a change. While the new settlers undoubtedly made their impression on the land, the land brought about a change in the character of the people. They became Australians and they were proud of it. They began to understand the country and they loved it. They realized they were on the other side of the globe and they made the necessary adjustments. The attachment to Britain remained, but it gradually approximated closer to the big brother admiration than to the son-father submission.

That, in rough outline, is the history of Australian development and reveals the Australian outlook. Naturally it is more true of some than of other Dominions. But it is a generalization, at least with regard to national growth, broad enough to apply to all.

Social conditions and political structures have the same kind of history. There was a strong British beginning—with other influences in South Africa and Canada—moulded and adjusted to suit the particular country.

In Australia, areas that at one time suffered from inadequate or intermittent rainfall are being made suitable for profitable closer settlement by vast irrigation schemes: Eildon Weir, 18 miles from Alexandra, Victoria, which provides electricity and irrigation over a wide area

By courtesy of the Australian News and Information Bureau, London

The type of early settler and the broad expanses of the countries in which he found himself made many of the social distinctions automatically accepted in Britain appear out of place. Indeed he hardly needed a new type of country to insist on changes. Was it not to get away from many of these distinctions and prejudices that he had left his home country? Perhaps sometimes he went too far the other way: perhaps he was often too violent in his opposition to traditional authority; perhaps sometimes he was too keen to establish an educational system with a purely utilitarian basis; perhaps he neglected too much the arts and culture for bread and butter. But that is more or less as it turned out. More or less, since it was often confined only to a tendency.

That is the background. In most respects the social life of the Dominions has a greater freedom, the standard of living is high and there is undoubtedly greater opportunity for all. In politics there is a liveliness and, some contend, a lack of the restraint traditional to Westminster.

* * *

Do the Dominions need more people?

They certainly need much larger popula-



tions for purposes of defence. This need is, as I have pointed out, hardly likely to attract migrants from Britain or from any other country. Eligible migrants will, quite understandably, say that that is purely a Dominion affair. It is not really: the defence of a Dominion is no less important than, say, the defence of India. But there is more in it than that, for defensive needs are not unconnected with immigration policies. Other things being equal, the greater the sense of danger from possible external attack, the more anxious that Dominion will be to frame attractive immigration policies.

Australia and New Zealand are the two Dominions most conscious of defence requirements, and Australia is more so than New Zealand. The reasons are obvious. South Africa is not so pressed with the burden: vast seas and a huge continent separate her from possible trouble—although Japanese designs on Madagascar must have awakened fears. Canada would appear to be least concerned: the U.S.A. is next door, even when it comes to Japanese movements in the Aleutians and when it is realized that air developments have brought disturbing elements much closer.

In South Africa as in the other Dominions the war has pushed ahead industrial development: South African workmen assembling transport vehicles

Here are the population density figures of the Dominions, together with those of the U.S.A., Japan and Britain. The comparison is interesting, particularly when the geographical position of each is borne in mind:

Australia	.	2.4	people per sq. mile
Canada	.	3.08	" " "
New Zealand	.	15.4	" " "
South Africa	.	21	" " "
U.S.A.	.	43	" " "
Japan	.	389	" " "
Britain	.	506	" " "

The Dominions' most interesting need, from the migrant's point of view, is that arising out of the industrialization of the past few years. This industrialization has taken place in all the Dominions. The degree varies. Canada is in the forefront, with a development that will demand an extension of overseas markets to absorb the output of her factories. The change from an almost purely agricultural country to more or less a balance between agriculture and manufacturing has been quickened by the demands of war. Figures are usually uninteresting, but when it is realized that 642,000 people were engaged in manufacturing industries in 1938 and that by 1941 the number had risen to

By courtesy of the South African Bureau of Information



980,000, Canada's rapid industrialization is more fully appreciated.

Australia's position is very much the same as Canada's. Before the war Australia did not produce a motor car engine, despite her considerable steel industry. Now she builds tanks, aeroplane engines, destroyers and optical instruments. Before the war there were 565,000 factory workers: now there are 733,000.

To a lesser degree South Africa and New Zealand have also made great strides in factory production.

That is the changed picture. The wartime industrialization has established a demand for labour. Of course, the Dominions could decide to slip back into the position of essentially primary producers. It would mean a tremendous upheaval. But they will not take that course. And, since these industries are so extensive, and since the decision will be in favour of their firm establishment and further expansion—then the need, the demand, will be for migrants possessing some skill in the various trades.

This will be the most urgent need. Settlers for the land will still be wanted—depending greatly on world trade, world agreements and the raising of living standards in backward countries. Apart from this, opportunities for land settlement will not be entirely lacking. In all probability South Africa and New Zealand will offer more than Canada and Australia. But with Australia and Canada, despite the changed emphasis, there is room for farmers, and it may well be that, after their own problems of demobilization and the replacing of war-workers have been overcome, they will find that too many one-time farmers have left the land for the factories and their places will have to be filled.

* * *

These are the needs. Do the Dominions appreciate those needs, have they made any requests for immigrants, have they formulated any plans?

New Zealand and Australia, judging by official and semi-official statements, are particularly anxious to welcome people from Britain. The only fear appears to be that they feel Britain will be unable to meet the demand. Estimates have been made, varying considerably, as to what is felt would be a desirable population. With Australia some estimates have gone as high as thirty millions. (The present population is a little over seven millions.) The generally accepted aim is twenty millions. But, whatever figure we decide on between the generally-accepted and

the highest estimate, the point is that Australians, official and unofficial, are keen on a rapidly increasing population. Australia, said Mr F. M. Forde in May last year when he was Acting Prime Minister, intends embarking on a positive immigration policy immediately after the war. And New Zealand is just as keen. Canada and South Africa have also signified their desire for migrants from Britain.

So far, however, none of the Dominions has come forward with a detailed plan. Why this delay? The question was discussed at the recent conference of British Commonwealth Prime Ministers in London. It may be plans have been agreed on, but even if they have, no publication has, as I write, been made.

Perhaps the reason for delay is simple. Some hint was given in Mr Forde's statement quoted above. He went on to say that the volume of immigration will be controlled by Australia's employment capacity, housing facilities and the rehabilitation of her own people now in the Services and war industries. There is no doubt that all Dominion leaders would subscribe to this. It is quite understandable and perfectly fair.

The Dominions have conscripted or directed their man-power into the Services or into war production. The rest—and it is a small percentage—has been retained for the satisfaction of civilian requirements. As with Britain, the change-over to peace will be a big undertaking. It may be an even bigger task than in Britain: many of the industries now flourishing were completely unknown to the Dominions before the war and some of those which will be retained in the peace have not yet experienced a peace-time existence.

It is natural, therefore, that the Dominions should regard as of first concern the readjustment of their own industries on a peace-time footing, the absorption of their own citizens in peace-time occupations and the adequate housing of their own people. A flood of immigrants would complicate even more an already complex situation.

But the non-appearance of detailed plans should not be misunderstood. The plans will deal with long-term migration over a number of years. And they will deal with concessions in fares to the various Dominions (should they be granted), nominated passages and organized immigration. Their absence, therefore, should not dishearten those people intending to leave for the Dominions under their own steam—those going out to take up particular jobs or those who have the necessary small amount of capital, or those who will be staying with friends or relatives.



Will. F. Taylor

On the farm









Photographs by John H. Stone



Fox Photos

Will. F. Taylor



John H. Stone





Omar

Smyrna, Ancient and Modern

by G. E. BEAN

"SMYRNA—where the figs come from." So, perhaps, most of us first heard that magic name. And the figs do, in the sense that they are assembled and shipped there, 40,000 tons of them in a season. But few of them grow there. Neither in ancient nor in modern times has Smyrna been a great centre of fig cultivation. In Pliny's list of places "where the best figs grow" Smyrna does not appear. The modern visitor looks in vain for the endless plantations he had imagined, and is inclined to write down the Smyrna fig, along with the Jerusalem artichoke, as a pious fraud. The real fruit of Smyrna is the grape. The district is mountainous, and the high ground mostly barren, but the small plains which lie between are covered with acre upon acre of tidy vines, neatly arranged upon the pattern recommended by Virgil. For every fig tree there must be a hundred vines. Varro tells of a Smyrnaean vine that bore two crops in a year; Pliny, in the time of Vespasian, makes it three crops. When the Emperor Domitian in A.D. 92 issued orders for the destruction of half the vines in the provinces, and their replacement by cereals, his ill-advised edict roused such scorn and indignation that the province of Asia ventured to appeal against it. That the appeal was successful says much both for the eloquence of the spokesman, the Smyrniote Scopelianus, and for the importance of viticulture in the district. For Domitian cannot have been an easy man to plead with.

Strabo, writing about the turn of the millennium, speaks of the wine of Smyrna as outstandingly good. And so it should have been, for hence came no less a vintage than the noble Pramnian, immortalized by Homer himself, the beverage of heroes. It came, we learn, from Smyrna itself, at a spot not far from the present railway crossing. You cannot order Pramnian today from the merchants of Izmir; instead, the wines of Buca and Bornova contend for the supremacy.

But if you had asked a Greek of Augustus's day wherein lay the fame of Smyrna, he would probably not have mentioned either figs or vines. Smyrna would have been to him a beautiful city where Homer was born.

Upon the question of its beauty all opinion, ancient and modern, is virtually unanimous;

and I myself can testify to the stimulating effect of working there upon one accustomed to the soberer charms of the English landscape. The city lies at the head of a deep bay running nearly east and west, narrowing at its extremity to a width of less than two miles. North and south of the town the hills come close to the sea; to the east rise Sipylus, with its legends of Tantalus and Niobe, and Olympus—not the home of the gods, of course, but one of the many other mountains which shared the name; thirty miles away to the west, and seeming to close the bay is the solid mass of "windy Mimas". Behind the town, rising steeply some 600 ft. and covered to half its height with the narrow Turkish streets, is the acropolis of the ancient city, Mt Pagus. The view from the castle at the top is superb, never two days the same. Blue sea, blue sky, and grey-green hills, snow-topped in winter, bathed in the Ionian sunshine, changing their colours with every variation of light, are truly enchanting; the eye never wearies of contemplating them.

But this is not what Strabo had in mind when he called Smyrna "the fairest city of all". He was thinking, not of the works of Nature, but of the works of man. So the Greeks always thought. Natural beauty was to them too much a matter of course to arouse any great enthusiasm. Centuries of town-dwelling have tended to breed in us an indifference to fine buildings, and a keen



[Stanford, London



Photographs by courtesy of the Turkish Press Department



appreciation of mountains, sea and rural solitude. With the Greeks it was far otherwise. They were closer to Nature, and their feeling for her was of a more practical kind. I remember once remarking in the hearing of a Greek peasant upon the beauty of a mountain scene in Attica; he smiled rather sadly at my quaint foreign enthusiasm, and observed, "Too many stones." So in the ancient poets natural phenomena are thought of not for their beauty but for their effect on man. You will not find in Homer a glowing description of a fine sunset: rather, "The sun went down, and all the roads were darkened"—I had almost written "were blacked out". The rainbow, "which Zeus sets in the clouds", is not a thing of beauty, but "a portent to mortal men". It is there for a purpose. When we read in Aristophanes of the country farm with its "violet bed beside the well", we think at once of a charming old-world garden, and it is rather disagreeable to realize that the violets are there to be sold for chaplets at the next city festival. Genuine admiration was reserved for the triumphs of human endeavour. There is nothing to be proud of in a beautiful landscape, but a beautiful building is an achievement.

And Smyrna had reason to be proud of hers. The patriotism of the wealthier citizens, the patronage of the kings and emperors, and the munificence of philanthropists like Herodes Atticus, combined to lavish on the city all the splendours that riches can confer. Walls, temples, baths, gymnasias, theatres, race-courses, public buildings of all kinds, were there, as in any great city of antiquity; but those of Smyrna were something out of the com-

(Opposite) *A general view of Smyrna from the Roman fortress on Mount Pagus. (Left) Greek statue, of Poseidon, discovered just south of Mount Pagus during excavations made in the 19th century*



By courtesy of the Turkish Press Department

Remains of the fine Roman amphitheatre at Ephesus

mon. So at least the ancient writers tell us. We cannot judge for ourselves, for very little indeed remains of them today. Of the theatre there are enough scanty traces to enable its size to be calculated; and so far as they go, lend supporting testimony, for it is one of the largest known. A portion of the market-place has been recently excavated—hardly enough to be impressive, but no disgrace to a fine city. The Smyrniotes themselves, at least, were well satisfied, and advertised the fact not only in their public inscriptions, but even on their coins. “First of Asia in beauty and size”, “ornament of Ionia”—the phrases read like a travel-agent’s poster; but this was in the early 3rd century, when independence was a distant memory, and a hundred years of firm and peaceful Roman rule had left the provincial cities little to strive for but such petty distinctions as these. It is strange to read of Ephesus assuming the titles “first and greatest metropolis of Asia”, and Smyrna replying with “three times temple-guardian of the

Emperors”; the days of autonomy and true greatness, when the friendship or enmity of Smyrna or Ephesus could win or lose a throne, seem very far away. But after all, to build a beautiful city is no ignoble ambition: Pericles made a similar claim for Athens, and no one who stands on the Acropolis now will quarrel with him.

In or about the year A.D. 178 a calamitous earthquake occurred at Smyrna and brought a large part of the city to destruction. Within two or three years, thanks to open-handed assistance from neighbouring cities and from the emperor Marcus Aurelius himself, it was quickly rebuilt with a splendour even surpassing its earlier fame. The modern parallel will occur to everyone. The fire of 1922 totally destroyed about half the town. Again the city has been rebuilt but the process is still not complete. Fine broad tree-lined avenues have been laid down, but the buildings which should line them are too often absent; waste ground and rubbish-heaps still take their place. Smyrna is at present



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(Top, left) The harbour of Smyrna from the cemetery which stands on high ground above the town; (right) shops and hotels along the quay front. A Turkish mine-sweeper has just come in. (Below) Boulevard Gazi, Smyrna, rebuilt after the fire of 1922 and named after that great figure, the Turkish President, Gazi Mustapha Kemal. (The word Gazi means conqueror)





Paul Popper

The washing place outside the Mosque of Isar, the quarter of Smyrna which contains the market. The old cobbler has a regular stand here. But periodically he goes on his rounds to collect more work, calling "Eskici Gidiyor" which means "the cobbler is going by". (Opposite) Mosque of Osman Pasha in the old Turkish quarter of the city

in the position of having lost most of its old picturesqueness without yet acquiring any compensating brilliance, though the red roofs and open spaces look pleasant enough from the hills above.

But Smyrna was one of the score or so of places which claimed to be the birthplace of Homer. Modern scholarship is, of course, slow to concede it to any one of them, being, indeed, far from sure that he ever had a birthplace at all. The Smyrniotes could advance no more tangible proof than the strength of the tradition connecting Homer with their city, and in particular the legend that he was the son of the river Meles, or at least was born beside its banks; and the Meles was the

river of Smyrna. The local residents today will show you the grotto where the poet sat and wrote; you must not mind if they show it in three or four different places, for the identity of the Meles is as uncertain as that of Homer himself. The common identification is with the stream now known to the foreign residents as the Caravan Bridge River, and to the Turks as Büyük Dere in its lower course, and in its upper part by the curious title of Yobaz Dere, the 'Students' Stream'. Of all the five rivers, none of them large, which reach the bay within two or three miles of the town, this has by far the most character. Flowing in from the south through the vines and olives of the village of

Paradise (now degraded to the more mundane appellation of Kizilçullu, 'The place of red saddle-cloths'), it winds round behind the acropolis through the deep and narrow valley of St Anna, and under the Caravan Bridge (surely the most disappointing of all the antiquities of Smyrna) to the sea. The ordinary visitor will be well content to accept it as the Meles. Be this as it may, the Meles remains the one visible indication of Homer's connection with the city; and we may say at least that if Homer was not a Smyrniote we shall be hard put to it to locate him anywhere.

To the traveller in Greece and the Aegean islands the strongest impression, after the marvellous beauty of the surroundings, is probably of the abundance of historical associations. Take your stand anywhere from Amphipolis to Pylos, and history is all around you. How much, you feel, has happened here! In Asia Minor, especially away from the coast, the feeling is very different. Stand among the ruins of Termessus, Aphrodisias, Patara, Sagalassus or Xanthus—great cities in their day. How much, you think, must have happened here of which we know nothing! A stray mention here and there in the historians, nothing more. And of the smaller cities the history is mostly a total blank. Aezani, Blaundus, Alabanda, Cadyanda, Idebessus, Tlos and a hundred more—who but the specialist has so much as heard their names? Yet their ruins are considerable, and the names themselves are evidence enough of their high antiquity. Even the great cities of the western coast cannot compare in this respect with those of Greece proper—Ephesus, Smyrna, Miletus. The reason seems to be twofold; first, the loss of the histories written in antiquity by natives of this region—Xanthus of Lydia, Ephorus of Cyme and others; and second, the course of their history. The great days of these cities fell in two main periods, widely separated, with all the great age of classical Hellas in between. In the 9th, 8th and 7th centuries B.C. these were among the leading cities of the Greek world; but history had not then begun to be written. In the first three centuries A.D. the standard of living was higher in the provincial towns than it has been until quite recent times; but under the narcotic spell of the *Pax Romana* history in Asia Minor stood still. And in the case of Smyrna we must not forget that for three hundred years, following her destruction by the Lydians about 580 B.C., she was not a city at all. All through the great classical period of Greece Smyrna was a mere group of villages.

Yet there is, after all, much here to stir the

historian's imagination. Sit for a moment in the café below the castle on Mt Pagus and look out over the bay. To your right is Sipylus, whence Pelops crossed the Aegean to found the house of Atreus and Agamemnon; beyond it, close against its northern face, is Magnesia, home of Pausanias and reminiscent of that other Magnesia on the Maeander, where Themistocles retired to end his days; on the slopes at your feet Alexander hunted boars and had the vision which urged him to re-found the scattered city; away in front of you, behind the Three Hills—once islands, but long since taken in by the encroaching delta of the Hermus—is Leucæ, scene of the defeat of the rebel Aristonicus and the extinction of the last Ionian effort to resist the power of Rome; somewhere in the city below you the apostle Paul lodged with Strataeas, brother of Timothy. And through the plains and valleys, north, south and east, run the roads to Pergamum, Ephesus, Sardis and the great caravan route to the East. What a variety of nations have followed one another here!—Lelegians, Hittites, Phrygians, Lydians, Persians, Greeks, Romans, Genoese and Turks. Smyrna has known the sway of all of these, some of them more than once. Which of them has made her happiest it would be invidious to inquire.

Smyrna is today, and has probably always been, a polyglot city—the meeting-place of East and West. She has stood for three thousand years, having known repeated destructions by sack, by fire and by earthquake, yet continuously inhabited, almost continuously important, and ready, to all appearance, to stand for three thousand more.



The Shans and Their Country

by F. KINGDON WARD, F.L.S.

I WAS in the Shan country when the war spread to the Far East, travelling off the beaten track by mule-paths which led up and down over the steep hills from one fertile valley to another, from one village to another, while armies gathered from the east and from the west, to protect the frontier. But the Japanese did not strike from the east, from French Indo-China and from northern Siam as was expected, and the British, Indian and Chinese forces had to march south in a desperate attempt to save Lower Burma, leaving the Shans to their fate.

The Shan plateau forms the western edge of the great mountainous region of south-east Asia. Travelling north from Rangoon to Mandalay by the Burma railway, beyond Toungoo the escarpment comes into view, rising abruptly from the plain not many miles to the east. In the early morning mist it looks like a sea cliff, blue, not white. There are few ways up the escarpment—the Thandaung road, from Toungoo, the Southern Shan States railway and road from Thazi, and the Burma Road and Lashio railway from Mandalay on a frontage of 500 miles; but once on the plateau, travel is easier than in most parts of Burma.

Although a plateau in the geographical sense, it must be remembered that it resembles the rest of Burma in being corrugated from north to south by parallel ranges of mountains which rise several thousand feet above the general level. Between the dark jungle-clad ranges, the open downs sweep in undulating curves, with tree-girt villages surrounded by rice fields hidden between the folds. Here and there a deep rift scores the country from north to south like a sword-cut, where a great river rolls southwards to the sea. But though the two largest rivers, the Salween and the Mekong, are much longer than the Irrawaddy, they flow, not through wide populous valleys, but through almost uninhabited gorges. Beyond the Mekong, which for nearly 200 miles forms the frontier between the Burmese Shan States and French Indo-China, there is no marked change. The country still consists of rolling plateaux, striped by parallel ranges of mountains and scored by deep valleys, whether it is called China, French Indo-China or Siam. Moreover the people,

though not Shans, are of the same Tai stock, with the same culture and historical background.

The eastern frontier of Burma is indeed an arbitrary one. That there is no fundamental physical change, or change of climate, over the whole of this south-east Asia highland region, and that it is inhabited throughout by Tai, shows clearly that we are dealing with a natural geographical region. Then why not aim at uniting all the Tai peoples, who, under various clan names, live in Laos, in south-western Yunnan, in northern Siam and in the Burmese Shan States? Would that not be a statesmanlike act, which might prevent the Balkanization of this region? No! That the Tai peoples are now disunited need not cause us any sentimental distress. The reason why any attempt to unite them, however well



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(Opposite: top left) Shan bullock carts: a common wayside scene when a string of carts tie up; (right) the Shans are Buddhists, but this gryphon at the base of the pagoda frightens away evil spirits. (Bottom, left) Pounding the day's paddy in a simple wooden mortar; the stamper is pivoted, and worked by foot; (right) Shan women are sometimes coy but laugh slyly behind their raised hands



Photographs by the Author





(Left) Shan woman with, behind her, cotton yarn hanging out to dry. She wears a striped cotton skirt and long-sleeved jacket. (Below) A Shan woman spinning cotton—one of the most important of the village industries



meant, would almost certainly prove unsuccessful and in the long run futile, is to be found in the Tai themselves. No people have been more mutually intolerant, more violently and spontaneously combustible, than they have. Mutual repulsion has driven them asunder, kept them apart. Had they retained the slightest cohesion, the Tai might today rule over south-east Asia, from Assam to Tonking, from Talifu to Bangkok.

Today the Tai are widely scattered. A modern Tai Empire, in which Tai peoples predominate, would include not more than 18 or 20 million people, comprising 14 million Siamese, $1\frac{1}{4}$ million Burmese Shans, perhaps as many Chinese Shans, and a million or so in Laos.

The 55,000 square miles of the Shan States, inhabited by about $1\frac{1}{2}$ million Shans, are divided into 32 separate states, each ruled over by its own chief or Sawbwa. True the states are federated, thanks to the Burma Government; otherwise they would be fighting one another. The largest of all the Shan States, Kengtung, has been given by Japan to Siam.

But if the Tai have no political sense, the Shans of Burma are nevertheless a lovable people. The great majority are peasants, but many are also hunters. Though Buddhists, they are not a bit like the Burmese in appearance, dress or anything else. Shan men wear baggy blue cotton trousers (*baungbis*), a white jacket (*eingyi*) and a big turban bound round the head; often a soft straw hat with a wide floppy brim is worn on top of the turban and tied under the chin. Every Shan carries a broad knife in a split wooden sheath, worn over the shoulder; but in spite of his militant appearance, he is a friendly person. Women wear a long dark-coloured striped skirt, open down one side, a short tightly-fitting jacket, and a turban. With their pale complexions, glossy black hair and dark flashing eyes, they are most attractive; their expression too is agreeable.

During the hot weather, in April a great festival is held in every village to usher in the Shan new year. This is the time to see the people at their best, enjoying themselves in family parties. It is perhaps the most delightful season of the year; the days are fine and sunny with a faint heat haze hanging over the dry paddy fields, the hills all round the plain are blue, many gorgeous trees are in flower in the leafless jungle, golden Cassia and pale Bauhinia, setting off the royal purple of Lagerstroemia. For days the villagers have been preparing for the event, the women making cakes and sweetmeats and smartening up their

best clothes, the men engaged on mysterious works out in the fields. At last all is ready, and the people, dressed in their best, carrying baskets of food, sally forth into the fields and sit down to eat and drink, chatter and laugh.

Long before dark, while in fact the sun is still well above the western range, the fireworks, which is what everyone has come to see, begin. A tall bamboo tower with a platform on top has been erected. It is perhaps 20 feet high: against it lean several curious-looking bamboo cylinders tied to sticks; their heads project above the platform, where a man is at work putting finishing touches. Other men on the ground are attending to other details. One notices a line stretched taut from the tail of the cylinder to the ground, at a little distance from the base of the ladder leading up to the platform.

Suddenly there is a loud fizz, and a shower of sparks is shot from the base of an object which darts with tremendous speed up the line. It reaches the top, fizzing violently, and is arrested. Everybody holds their breath. Hurrah! the fuse of the great twenty-foot rocket has caught, it splutters! There is a moment's pause, then, whump! swish! The heavy wooden missile trembles, lurches into the air with a cascade of fire pouring from its base, rises to a height of forty or fifty feet, and describing a graceful parabola, drops heavily to earth perhaps fifty yards away, where it lies spluttering and burning. Then everybody goes mad, laughing and cheering; children and women too dash across the field screaming at the tops of their voices, collect round the fiery monster. Meanwhile the men are preparing to set up another. Rocket after rocket goes up—it is the only fireworks they know. The fun grows fast and furious. Sometimes two, or even three, are ignited together; not infrequently one refuses to rise, or leaps drunkenly to one side, scattering the yelling crowd with its fiery tail. A large village will set off two dozen of these home-made rockets, representing a large outlay in gunpowder.

Shan villages are neat and clean, the wooden houses, grass-thatched, or in prosperous towns like Kengtung with tiled roofs. Their monasteries, half hidden among venerable trees, are extremely picturesque, and since Buddhists are not fanatical, one can walk in the quiet courtyards at peace with the world. Many of the pagodas too are striking. The Shan monks wear the saffron-yellow robe, shave their heads, and beg their bread, or rather rice, from door to door.

On the raised platform in front of each house women sit weaving the cotton cloth



(Above) The laughing cavalier—a true Shan type. (Opposite: top left) The Shans are expert boatmen. Here are the boats in which they run the Mekong rapids; (right) on the Mekong. The steersman who takes a canoe through heavy water is always a middle-aged man of ripe experience; (bottom, left) grandpapa and the 3rd (or 4th?) generation. Shan girls marry at about 18 years of age. (Right) What a joke! What's he doing? Shan women going for a bath have a laugh at the author, who is taking their photograph





The belle of the village returning from the river with her bamboo cylinders filled with water

which is their wearing apparel. All the technique of the piece goods industry from the cultivation of the cotton plant, the cleaning of the seed, spinning, dyeing and weaving, can be seen. The machinery is primitive, but the finished product is both tasteful and durable. Today its durability is being tested as never before. As in all parts of south-east Asia, the ubiquitous bamboo enters largely into their lives, for construction and other purposes; ideal houses, water vessels, pipes, hats, farming implements, household utensils and many other things are made entirely or mainly of this invaluable grass. Even machinery is made of bamboo, irrigation wheels, and sugar-presses for example. It is often necessary to lift water from a river ten or fifteen feet up to the bank in order to water the rice fields. A bamboo paddle-wheel is constructed, so that the stream, pushing against the mat paddles, shall make it revolve. Attached at a tangent to the circumference of the wheel is a number of

bamboo tubes, which as the wheel revolves scoop up water from the river, then as they tilt over at the top of their journey, pour it into a trough on the bank, which carries it to the fields. A series of dripping wheels—each twenty feet in diameter, creaking and groaning in their wooden bearings, streams of water pouring from their vessels—is an amazing sight. Paddle-wheels turn sugar-presses on the same principle, only here the rollers are grooved and vertical, working in opposite directions, to draw in the long sticks of sugar-cane.

I have said that the vast majority of the Shans are cultivators, and as in other parts of Burma there are two types of cultivation, *taungya* or dry hillside cultivation, whereby the forest is cut down and burnt, and the crops sown among the ashes; and permanent wet rice cultivation in the hill-girt plains and valleys. The former method is practised mainly by the various hill tribes of the Shan States, of which there are a great many occupying the higher hills, while the dominant and more numerous Shans of course occupy the better-watered more fertile hollows. Among the hill tribes may be mentioned the Tai Loi and the picturesque Kaw, the Padaungs, whose giraffe-necked women created a sensation in Europe when seen in exhibitions there before the war, the lake-dwelling Intha who row with their feet instead of their hands, the Palaungs and the savage Wa.

But to see the happy-go-lucky Shans at their best, one should watch them handling their dug-out canoes on the boisterous waters of the Mekong. It is an experience to shoot the rapids with them, for they are expert watermen, and rarely is there a mishap. They are also hunters and muleteers, smugglers and traders. Gold is found in the sands of the Mekong, and in some of the riverine villages every family will on occasion turn to gold-washing, though the profits are small. The auriferous gravel is panned by women and children in a shallow circular wooden dish, not unlike a Shan hat or a limpet shell.

As stated already, once on the Shan plateau movement, in spite of mountain ranges and river gorges, is easier than in most parts of Burma. This applies especially to transverse communications, although here as elsewhere it is less arduous to move on north and south lines, parallel to the hills and valleys, than it is to move east and west across these obstacles. Nevertheless the only transverse

main road in all Burma runs through the Southern Shan States. Beginning on the Irrawaddy, it passes through Thazi on the main railway line, climbs the escarpment to Kalaw, passes through Taunggyi, crosses the Salween by ferry, and reaches Kengtung. Nor does it end here. Climbing again to the outpost of Loimwe, it descends towards the Mekong, and turning south crosses the Siamese frontier at Tahilek, whence it reaches the Siam railway. Even before the war it was possible to motor in the dry weather from the Burma railway to the Siam railway, thus completing the overland route from Rangoon to Bangkok. The total length of the road from Thazi to the Siam railway at Chiengmai is about 600 miles. The Japanese have probably made it an all-weather road by now.

The 'Burma Road' of course does not run from west to east. From Rangoon it runs due north for 400 miles to Mandalay. Thence to Lashio its direction is north-east, after which it again turns north to cross the China frontier. Only after leaving Talifu does it turn east to Kunming. Just the same it has to cross the Salween and the Mekong, and the high mountains in between.

There are two pleasant hill stations in the Shan States, where before the war a number of Europeans had retired. These are Maymyo in the north, Kalaw in the south. Kalaw, in a green bowl among the pinewoods, its gardens brilliant in spring with English flowers, is charming. To the market come hill women carrying baskets filled with blue orchids, one of the most beautiful in the East. Forty miles beyond Kalaw is Taunggyi, the capital of the Southern Shan States, on the road to Kengtung and Loimwe. This last was formerly the most distant outpost in Burma. Before the present road was built, one reached Loimwe on foot, with mule transport to carry one's kit. It is not so many years since a subaltern, posted to Loimwe, got out of the train at Thazi in the early morning and asked the station-master how far it was to Loimwe, and which was the way, as his leave was up and he wanted to get there by midday. The station-master took him by the arm, conducted him into the road, and pointed to the east where the dawn was breaking over the edge of the Shan plateau.

"You see those hills over there, sir?"

"Yes."

"Well, Loimwe's over there beyond those hills. Keep straight on along this road."

"It looks quite a long way to the hills!"



War comes to the Shan States. Scene in a peaceful village when Chinese troops arrive to guard the frontier in January 1942

How far is it to Loimwe?"

"Just 400 miles, sir. Shall I get you some mules?"

It may be some time before it is possible to revisit this attractive country and see the happy expressions on the faces of these charming but impractical people. Meanwhile it would be rash to hazard what the future has in store for them. One thing is certain. A thousand years of history testifies to the fact that the Shans are incapable of combining and agreeing among themselves. They are non-cooperative. There are too many petty ruling families among them; they are too prone to intrigue, too indifferent to the common weal. As usual it is the ambitious ruling classes who make trouble; the common people only ask to be let alone.

After the war we are in honour bound to make every effort to help the Shans, to give them stable government, and to protect them in the future from their enemies no less than from themselves.



Buttons from Nuts

Photographs from the Ministry of Information

There is in Eritrea a species of palm tree on which nuts, rather like small coconuts, grow. These Dum nuts ripen in six months, and are then knocked down with long poles, amassed in heaps at a railway siding, whence they are transported to a factory at Keren, where they are made into buttons for the Allied Forces





Stanford, London



(Above) The outer husks are removed by rotating the nuts in barrels. (Left) The button is fashioned from the hard core of the nut, sliced by circular saws to a standard thickness



Eritrean girls passing the sliced nuts through sieves which are of varying mesh —



and shaping the edge and face of the button by machine



With grace and skill, an Eritrean girl watches over an automatic machine for punching holes in the buttons. These girls are intelligent and adaptable and well able to take charge of their workshop. The Keren factory in which they work was practically destroyed by fire in the Eritrean campaign and has been rebuilt with the cooperation of the British Military Administration. It is now in full production, supplying buttons for the Middle East Command as well as exporting large quantities to the United Kingdom



In the Hills of South Wales

Notes and Photographs

by J. G. HUBBACK

These photographs were taken in the tract of wild mountainous country just north of the South Wales coalfield, running from Carmarthen's Black Mountain in the west, through the Eforest Fawr group and the Brecon Beacons, to the range of Black Mountains beyond the beautiful Usk Valley in the east. The views to be seen from the heights, especially to the north, well repay some strenuous climbs. The higher hills are wild and desolate but some of the lesser ones, nearer the fertile valleys, retain touch with the life below. From one of these, Tor-y-Foel, which overlooks the Usk and the lovely Glyn-Collen, the vista up and down the valley makes a fine picture. The valleys, or cwm, are intersected with many mountain streams and waterfalls. Rivers flow in deep tree-lined gorges, with many falls. In all my various explorations of these hills I have rarely met another human being, near as the region is to industrial towns and such cities as Cardiff, Newport and Swansea. Above is the road up to Brecon Beacons from the railway station at Torpantau



The red sandstone cliffs of the Black Mountain, Carmarthen, at Llyn-y-Fan Fach



View north toward the Brecon Beacons from Craig-y-Llyn, Glamorgan

The highest and best known vantage-point in the Brecon Beacons, Pen-y-Fan (2906 feet), from which on a day of good visibility wonderful panoramas can be seen on all sides. To the left is the neighbouring height of Corn Du. (Opposite) Looking across Glyn Collaen towards the source of the river Caer Panell, a tributary of the Usk. Notice the waterfall, called Blunwy-Glyn, near the farm.







The Marsh Arabs of Iraq

by EDWARD BAWDEN

Mr Edward Bawden has recently returned from a visit he made as official war artist for the Ministry of Information to Iraq and Arabia. This is his account of some of his experiences while staying as a guest with different Arab sheikhs. The illustrations are from photographs of his own paintings

It was cold standing on the sand by the Baghdad-Basra night train at four o'clock in the morning. In the bleak darkness I stood close to the warmth and dim lights of the train from which I had descended: no one else got off. It was cold and dark, and at first it seemed to be very silent until I caught the faint murmur of people talking: leaving Mohammed with the luggage, I walked round to the other side. I could not distinguish much though aware of the presence of a crowd, but as I picked my steps to a chink of light flashing from a room as the door swung

to and fro I found that the ground was littered with untidy bundles lying about in awkward profusion—men wrapped head and heels in 'abas either asleep or showing a comfortless indifference to their surroundings, and women squatting motionless in groups, heads bowed as though in prayer, their faces entirely swathed in black veils. As the darkness lessened a thin, grey light threaded nearby objects together, then more rapidly it increased until in the starchy white light of the hour before daybreak the scene at Ur Junction became coherent—the standing



Photographs from paintings by the author. Crown copyright reserved

(Opposite) A creek flowing from the Euphrates into date gardens belonging to the Hatcham tribe. (Above) Sheikh Muzhir Al-Gassid in his younger brother's madhif (guest-house)

train for Basra, the small brick-built station office, the crowd seated on the ground. Men pulled aside their 'abas and put them on, women loosened their veils and the low murmur rose to a vehement clack of conversation. There were stirrings on the train as windows were dropped and heads thrust out to see what were the chances of getting a cup of tea. A whistle was blown. The train moved slowly, then gathered speed, and I watched it until it became a stationary speck in the far distance.

Without the long line of coaches Ur Junction lost what gave scale and significance to the station. The scene opened to a wide wheel of sand, the level rim of which was



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broken by the tents of a distant camp and, in another direction, by a few low hills which I did not recognize as the rubbish-heaps on the site of ancient Ur. Among the crowd excitement was being focused upon a coach already crammed crate-tight, but with people still pushing and shoving to get in, all of them, both inside and out, simmering volubly. From somewhere an engine dragged an empty coach which was shunted and linked to the one filled with people; then, feeling self-conscious because of the importance afforded by the contrast, I climbed in with my Sudanese man, Mohammed. A gentle tug was given to the coach and off went the diminutive two-section train on the fourteen miles run to Nasiriya.

Twice in two years I have accepted an invitation to visit Nasiriya given me by Major C. S. J. Berkeley, the British Political Adviser in the Muntafiq. Nasiriya, a small town built by the Turks on the lower Euphrates, is the administrative centre of the Muntafiq; and the Muntafiq, under the control of a *Mutas-arrif*, or Governor, H. E. Musa Kadhim, is one of the fourteen *Liwas*, or Provinces, into which Iraq is divided for Government administration. From the point

of view of tribal life it is one of the most interesting *Liwas*. There are three separate and well-defined types of tribal life: the riverine or Marsh Arabs, locally called *Ma'adan*, living along the course of the river and among the swamps by Hammar lake; the settled Arabs, cultivating crops of wheat and barley on irrigated land; and the Beduin or nomadic Arabs, driving herds of donkeys and camels in search of grazing, who may wander into Saudi Arabia during the winter and spring months. Major Berkeley arranged an itinerary for me so that I should be able to stay as a guest with different sheikhs by turn, and he decided that I should go first to those Arabs living in the marshes.

The trip into the marsh country began at Suk esh Shuyukh. The market town of the sheikhs lies about fifteen miles from Nasiriya; it is lower down the river and in that direction as far as a car can be taken. The first short stretch down the river was made by motor launch. Sheikh Haji Farhud Al-Fandi and a party of Arab friends who were coming for the evening meal met me at the serai. It was hot crushed together in the small cabin, but as the launch swung into mid-stream a light breath of air due to the motion of the boat

(Below) Sheikh Raisan Al-Gassid, younger brother of Sheikh Muzhir. In the distance a small *madhif* can be seen in the flooded rice fields. (Opposite, top) A *mash-huf*—a canoe with the graceful lines of a gondola—and a light canoe made of reeds and bitumen; (bottom) tribesmen, some with rifles, gathering for the evening meal outside the *madhif* of their Sheikh, Haji Farhud Al-Fandi







Murad, one of the younger sons of the Sheikh shown opposite, sitting in the diwaniah, a mud and timber pavilion, with two of the Sheikh's bodyguard. Their rifles, which they prize highly, are decorated with costly silverwork

touched my hot, sensitive skin as softly as a feather. In a few minutes the launch was chugging round a wide bend, and a lovely vista opened of broad, muddy water swirling with the current and banks fringed with dense plantations of palms. At the entrance of a creek we were transferred from the launch into several small gondola-shaped boats waiting for us by the bank. With two men poling vigorously, one on the prow and another standing on the stern, and the strong current in our favour, the boat, called a *mash-huf*, slid down the creek with an easy, rocking movement as though sliding upon ice. A jungly growth of palms, seemingly as endless as a forest, filled the plantations on each side; the foliage of those trees nearest to the creek arched overhead. Seen from water level, the palms appeared enormous in size. Nothing stirred the heavy fern-like fronds that stretched out. Underneath, among a multitude of trunks, dark strips of shadow wove a deceptive darkness. With the darkness was silence; it was breathlessly quiet, deserted, a

shadowy interlacement of palm boles and stiff, sword-like leaves. But was it so quiet, or deserted, only filled by tigerish lines of shadow falling across the ground and the trees? As the senses responded more sensitively, the eye, becoming observant, picked out the shadow-hidden activity, the solitary reed hut draped by the large leaves of a climbing cucumber, or a man or woman motionless, watching, or at work; so too the ear became attentive—a jay might be heard shrieking among the trees as though a squeaky door had been opened and shut very rapidly several times, and the low, warm purring note of the pigeon near at hand. In the current a swimming terrapin or a turtle might raise its head like a periscope and at once clap it under water again. The blue flash of a kingfisher cut the air. A speckled bird hovering four feet above the surface dropped like a stone and emerged with a silver fish. Sitting comfortably cross-legged on the carpet at the bottom of the boat, supported behind and wedged in with



Sheikh Haji Farhud Al-Fandi sitting in the inner room of the pavilion. He is holding, not a rosary, but the string of amber beads used by everyone for fidgety fingers

cushions, I smoked a cigarette and felt at ease.

The boats drew up to the sheikh's *madhif*, or guest-house, but we were taken instead to the *diwaniyah*. This was a mud-and-timber pavilion on one side, but partitioned to produce the effect of an outer and inner sitting-room, the former set out with long, wide wooden pews covered with carpets, the latter furnished with low easy-chairs, spindly occasional tables for holding ash-trays and at one end a large piece of furniture with pegs and a looking-glass. A number of Iraqi flags had been sewn together to serve as a banner decoration for the full length of the back wall: pinned high up over the hall-stand was a poster with a portrait of Churchill. In the *diwaniyah* the initial ceremony of taking coffee was enjoyed more informally than would have been possible in the *madhif*. On other days I used it whenever I needed the relaxation of semi-privacy, or a sleep during the hot hours when most things are quietened by the oppressive heat, except for the flies which

were quickened to feverish activity and the fleas that were slyly troublesome at inopportune moments.

With sheikhs who did not possess a *diwaniyah* I lived in the *madhif*. A *madhif* can be spotted a great way off because of its larger size, peculiar shape and straw colour: it is always constructed of tall-growing reeds brought from Hammar lake, which have the thickness and strength of an ordinary garden bamboo. The exterior of a *madhif* might suggest a fanciful tin tabernacle of the Free Churches done in straw by natives of the Congo, but on entering it the impression received by the long, smoke-blackened tunnel was more joyfully reminiscent of an Underground station stripped of the advertisements. By contrast to the blinding sunlight the apparent darkness was more illusive than real; as the eyes became accustomed to the change it seemed a pleasantly tempered light, as restful as the temperature was refreshingly cool. Down the sides men squatted on mats; in the centre was the coffee-man's hearth and line of



bright brass pots; from the hearth rose a wisp of smoke to join the bluish haze that hung under the roof. On entering it was polite to intone the greeting "Peace to you," whereupon a general uprising took place and in unison it was returned by a solemn rumble of voices, "And to you peace." At the far end carpets were spread and easy-chairs arranged along both sides and the end wall. When everyone was seated other greetings were given in ritual order, then the coffee-man came forward to pour some drops of bitter coffee into one of the small cups from the nest of three or four held in the left hand. Three times the cup can be replenished, then the coffee-man moves to the next man, and the guest sits back in his chair until he is mildly surprised by being offered a triple succession of glasses of strongly sweetened tea, followed again after a few minutes by more cups of coffee. As the bitterness and the sweetness excite a thirst, a bowl of water, scooped from the nearest ditch, passes from mouth to mouth.

Thus many hours were spent in company, drinking, talking and smoking the long thin Arab cigarettes. After a time often I was seized by the acute restlessness which I felt as a small boy when I went with my mother to a sewing meeting at the Chapel. An Arab who noticed this and could speak some English would be sure to say, "Sir, please take your rest," and plump half a dozen more cushions around me.

The first day at any new place was given up to resting, also trying, with the help of Mohammed, who had acquired a slender vocabulary from me, to sustain an intermittent show of conversation. Questions were asked unless it was deemed polite to ask none, though unblushingly I set an example by asking many. Their questions followed certain lines: Why didn't I speak Arabic—it was easy to learn? Were there Moslems in England—how many? Did we use camels, grow rice, etc.—why not? What tribes lived in London—and did I know their sheikhs? Except by effendis or men who had had a school education the natural assumption was accepted that life in England, being of a tribal character, conditions were much the same as in Mesopotamia or elsewhere in the Near East.

Waiting for the evening meal was the social

occasion of the day. Men came at sundown to take their places on carpets laid down in the form of a square, on a sort of open courtyard where the sheikh presided. Neighbouring men of importance with a few armed retainers came in when word had gone round: it was an obligation. The social occasion was anticipated—was it not of daily occurrence?—and the sheikh busied himself beforehand, with a womanly care giving directions for the laying of the carpets. Each man gave the usual, general greeting, then his equals stood up until he had squatted upon their mat. The arrival of a sheikh threw the whole gathering to its feet, visitor and host would rub hirsute cheeks, and he would be led to the best carpet. When darkness fell an antique lantern would be lit and placed at some small distance from the company—a necessary precaution, as it attracted a winged gathering of its own: thousands of midges danced round the light and swirled upwards like smoke curling from a bonfire; a congregation of extraordinary insects crawled in the lighted patch on the ground, the praying mantis, stick insects, black horny beetles, and, as if sensing fun, frogs and toads came hopping from all directions to join the geckos, and a cat or two pawing and chewing moths.

A hundred men or more had now gathered and were talking in the half-darkness. The daytime heat had gone; a light breeze moved the air, which was still hot and sticky. Overhead was a faint starlight but the darkness around was very real; and from that dark and watery limbo came the incessant croaking of frogs, a harsh snapping sound like that of dogs barking afar off. It was getting late. Then I noticed a group of men and boys had risen and was walking off to the harem; a sign that the meal was ready. A sheet was spread as the men and boys returned. The procession was led by five men staggering with the weight of a pan of rice, on which a whole boiled sheep had been laid; other men followed carrying dishes of rice and sheeps' heads, boiled chickens, roast fish, curries and gravies and vegetables, sweet ground rice and sweet spaghetti and fruit. The pan of rice was placed in the centre, around it a circle of rice and sheeps' heads, and then the remainder in between until the sheet was covered with plates touching rim to rim. The ewer and basin was brought for washing hands. The sheikh called the men of the first sitting individually by name. The circle of men sitting on their haunches ate in silence, and ate rapidly, using only the right hand. The sheikh did not consider it polite to sit with his chief guests; instead he sat at my side and

(Top) *This is a turada. The rows of boss-headed iron nails are peculiar to this type of boat and are said to increase its strength;* (bottom) *the paramount Sheikh of the Hasan tribe and his youngest son*



Sheikh Haji Maktuf Al-Haji Hasan, and one of his brothers. Through his property passes the channel dredged during the last war to enable paddle-steamers to proceed up the Euphrates

dropped an abundance of tit-bits on my plate, sheeps' ears, chickens' legs and lumps of fish, so that all I need do was to grope and identify by touch the sweet from the savoury. The first man to finish and stand up was a signal for all to stand, but seeing my slowness a polite delay ensued; a guest of honour may stay a few minutes alone, indeed he is urged to do so, but he ought to hurry. I washed my hands and sat off-stage to watch the subsequent sittings: three or four finished in turn, the average sitting lasting six minutes, but the last of all and most impressive was that of the boys, who came quietly and quickly took their places. By the age of ten a boy has acquired all the dignity of his father; there was no scrapping or play or talk among this small party, nor could I see signs of greed; tit-bits were handed around as they were among the grown-ups. The meal over, the sheet was shaken, and what remained, mostly rice, went back to the harem for the women. The date gardens surrounding the madhif of Sheikh Haji Farhud Al-Fandi formed

virtually an island—an island under water in the middle of a temporary lake made by the floods. Water swept along the waterways, but under the dates it was stagnant and weedy, the home of a multitude of frogs and water-snakes and terrapins. By jumping ditches and stepping precarious bridges (a palm trunk dropped from bank to bank) it was nearly possible to walk round the perimeter as a fly might on the rim of a saucer; but the path was narrow, often a ridge of clods upon which it was necessary to use circumspection rather than the arrogance of a cat trotting along the top of a brick wall. Any ridge that led a path in among the trees was certain to go to the huts of the cultivators, to placé it was undesirable to visit such as women's quarters, and it was evident that these were guarded by fierce dogs. Outside the perimeter lay shimmering sheets of water, from the surface of which rose a misty steam, producing with the intense sunlight a painful glare, and with the heat a bathroom humidity. Boats glided over the



Part of the village of Hammar, which during the height of the flood season is split into several islands. The date palm standing in the foreground shows the effects of a disease

glassy surface, and many birds, egrets, herons, ducks, pelicans (called by the Arabs the water-goat), were busily fishing.

The scenery was most attractive, but it did not differ in essentials from that which surrounded the madhifs of Sheikh Muzhir Al-Gassid and his brother Sheikh Raisan Al-Gassid, who lived on the other side of the river. These two brothers and Sheikh Haji Farhud were sheikhs of the Hatcham tribe, and in 1935 when Sheikh Raisan was in rebellion against the Iraqi Government, he and his brother Muzhir and Sheikh Haji Farhud were all held in captivity for a period. Sheikh Raisan Al-Gassid is now a Deputy to the Iraq Parliament.

Five hours down the river by mash-huf lived another important sheikh, who for several years had been a Deputy to Parliament, Sheikh Hammuda Al-Muzai'il, the paramount sheikh of the Hasan tribe. Here the country was more open because of fewer palms and greater floods of water. Of dry ground there was not much to be seen, even

less for the stranger to stretch his legs upon, merely a platform for the sheikh's madhif and diwaniah, and behind for a mud-built harem, a four-square windowless building in which the womenfolk lived. Close by the madhif ran a tributary of the Euphrates from which water was drawn into the nursery beds for the young rice plants; later, when the floods subsided, these plants would be pricked out and put into the soft mud of the fields; but now the mat of grass-like leaves was a brilliant green, and here and there a stake had been thrust into the beds, and upon it a turtle hung, impaled as a warning to others of its predatory kind. Another common sight was men lining the river-bank at certain hours holding fish spears poised ready to strike; elsewhere a solitary man might be met at dusk wading waist-deep in the shallower water where poisoned bait had been thrown to induce fish to float conveniently to the surface in a fuddled state.

From Sheikh Hammuda I went on to Sheikh Haji Maktuf Al-Haji Hasan, the



sheikh of the Albu Khalifa tribe. From this sheikh's village there was little to be seen except water; it stretched away across Hammar lake towards Basra in an unbroken sheet for seventy miles; for three-quarters of a circle the skyline was a taut straight line dividing a waste of waters from a cloudless sky. To get from the sheikh's collection of reed huts to the village of Hammar meant crossing twenty miles of intervening water, a risky journey in a mash-huf unless made in still weather. Besides it took more than thirteen hours. So I was glad to accept the offer of a launch to be sent down from Suk esh Shuyukh, and even in this the journey took a long time. The countryside had now completely changed, a predominance of palms had given place to that of water. It might have been a branch of the sea, there was nothing of near interest to attract attention, only pelicans and far-away strips of palm-fringed land that moved with an imperceptible and dreamy slowness.

At Hammar a fine crowd from the market gathered to watch me land; a young man, his hair standing on end, helped to pull me up the bank and, to my surprise, said in a shocking accent, "Ow are yer?" He was the village schoolmaster who taught English, and this being a great day for him—I had no need to take his word for that—he displayed himself and me to public advantage, delaying progress to my host, Sheikh Sharif Al-Hadi of the Bani Hutait tribe, by organizing a detour which included the market, the police office and the school. When I was allowed to be taken by mash-huf to the promontory on which stood the sheikh's madhif other boatloads came too, in one the entire Police Force comprising a corporal whose hair had been badly dyed bright orange with henna, and a lumpish constable who smiled; in another boat the three masters of the school, in others parties of Arabs. My five days were marked by an excessive show of friendliness.

I travelled to Chebayish with the Mudir, who turned up one morning early, before dawn. To reach Chebayish took five hours and for much of the way the boat had to be poled through narrow channels in the reed-beds; the reeds standing seven feet out of the water hid the view, and worse, stopped the least breath of air, canalizing the humid heat so that for us in the boat it was nearly unendurable. Sometimes in occasional open

(Top) Boats moored to the only street in Chebayish, which runs from the market as far as the serai, the flag of which can be seen in the distance; (bottom) a coffee-man of negro descent

patches of water a few reed huts were passed, built upon small rafts, floating settlements that in a high wind moved with the 'tide'. The rafts were made by laying down bundles of reeds in the shallow water and building up to surface level—perhaps five or six feet—and steadily laying down more reeds on top just as fast as those beneath became compressed and allowed the water to seep through. On each raft a hut had been constructed by tying reeds together on the lines of a four-poster bed and covering it with reed mats. This was large enough for a family and one or two cows and any number of hens to muck-in together and share their bugs and fleas: by any standard of living it was a wretched life in that fearful humid heat. Water buffaloes up to their snouts in water lived in decent luxury. Nearly all the children were naked, perhaps sporting in the water or helping mother pat pancakes of freshly fallen cow-dung to be dried for firing, doing some other small job or sitting about listlessly. One poor little fellow, a deaf-mute syphilitic idiot, nude as the other children were, to whom Mohammed gave a cucumber, could not eat it and express his delight at the same time; he lost a lot by dribbling it down his stomach while making raucous, bestial cries of pleasure.

Chebayish, the centre of the woven reed-matting industry, was a large township having no roads, or rather one only through the market to which people moored their boats. The madhifs and huts stood in isolated groups, entirely surrounded by water, but crushed together with the dwellings were masses of vegetation, palms, blue-gums and immensely tall reeds fifteen feet high. In a boat drifting down any of the broad waterways through the town, the glimpses seen of straw-coloured houses through dark trees and the blackish-green reflections of these in the still water created an ideally lovely combination. Chebayish had a character of its own; also it had a climate so severe that I was persuaded to cut my stay as short as possible and return to Nasiriya.

My second visit to the Marsh Arabs was of longer duration and a more enjoyable experience. But again, as on the previous visit, I was impressed by the Arabs themselves, by their good manners and simple dignity, above all by an amazing sensitiveness to friendship which seemed to draw no intolerant line between differences of colour, race or religion, but, as with conversation, tried to ignore the existence of a barrier. I hope some day to meet these good friends again, to whom on parting the words were "If God is willing".



The Structure of the Past

VI. The Civilization of Byzantium

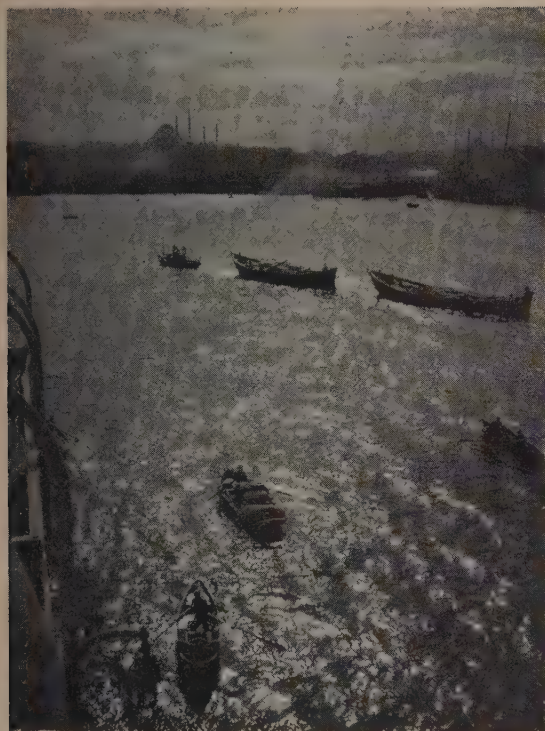
by STEVEN RUNCIMAN

When we look back today on the sources of our civilized inheritance, with its Hellenic, its Roman and its Christian elements, we are apt to forget the immensely important part played in their preservation by the Eastern Roman Empire, which after the foundation of Byzantium as its capital became for a thousand years the fortress and treasure-house of the ancient world's accumulated riches and wisdom, whose fame was a theme of wonder for poets as far north as Scandinavia and whose religious and artistic influence can be found all over the British Isles in Anglo-Saxon times. Byzantium also has a special interest for us, as an example of an Empire maintained essentially by sea power

THE contributions of Greece and of Rome to humanity are well appreciated. Less known and less understood is the part played by the civilization that followed, the civilization that we somewhat arbitrarily call Byzantine. This was no entirely new civilization, but, rather, a development out of Greco-Roman civilization broadened by continual influences from the East.

When the Roman Empire, weakened by

political chaos and economic depression, had to support the impact of the Barbarian Invasions, its Western provinces were overrun, but the Eastern provinces survived. This was partly due to accidents of geography. The Barbarian attack came from across the Northern frontier, not from across the Asiatic frontier, whence it had been more usually expected. Partly it was due to accidents of personality, which provided the



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Stanford, London

In the 4th century A.D. Constantine the Great, inaugurating the Byzantine Empire, founded a new capital in the East at Byzantium on the Bosphorus. Firmly placed on an easily defended peninsula, with its wonderful harbour situated where two of the world's chief trade-routes crossed each other—the land-route from Europe to Western Asia and the sea-route from the Black Sea to the Mediterranean—it gave to the reformed Empire a prosperous centre where the government could be carried on in security

East with abler rulers than the West possessed. Partly the causes went deeper. The East was the home of older civilizations. It was richer and economically more developed than the West. Its population was far larger and its level of culture far higher. The Roman Emperors began to realize this; and more and more time and attention was given to the East. Early in the 4th century A.D. the Emperor Constantine the Great made three reforms. He reorganized the currency, setting it on a firm basis. He recognized an Eastern religion, Christianity, as the chief religion of the State. And he founded a new capital for the Empire, in the East, at Byzantium on the Bosphorus. These three moves may be said to have inaugurated the Byzantine era.

The reformed currency kept its value for nearly eight centuries. As a result, for all that time the Imperial capital was the unquestioned financial centre of the world. Christianity gave to the Empire a spiritual unity. Far better organized than its rivals, it soon ousted them and became the sole religion of the State. The Emperor, as Vice-roy of God, won from his subjects an undivided devotion that he had never obtained

when he claimed to be the Divus Augustus. Finally the new capital, firmly placed on an easily defended peninsula, with its wonderful harbour, situated where two of the world's chief trade-routes crossed each other, the land-route from Europe to Western Asia and the sea-route from the Black Sea to the Mediterranean, gave to the reformed Empire a prosperous centre where the government could be carried on in security.

We call this reformed Empire Byzantine from the ancient name of its new capital, Byzantium. Constantine himself called his city 'New Rome', but it was better known in the West by his own name, Constantinople. To its inhabitants it was simply 'The City'—*'s tan Polin*, in their vulgar Greek: from which the modern Turkish name of Istanbul is derived. The city was typical of the civilization that it housed and that may therefore legitimately be called Byzantine. It was an old Greek merchant city, raised to be the Roman capital, and was in constant touch with East and West and North and South, but particularly with the East.

Byzantine civilization inevitably altered much in the eleven centuries that passed between the foundation of Constantinople



The great cathedral of St Sophia has a vast floor space and a vast dome. (Opposite and below) Reproductions of colour plates from a book on Saint Sophia published in London in 1852 by C. Fossati, an Italian architect who restored the building after an earthquake. (Right) An illustration from J. G. Grelot's Relations nouvelles d'un voyage de Constantinople, published in Paris in 1680. The notes which explain the features marked with the alphabet are very full and interesting



and its capture by the Turks. But its bases remained the same. It never forgot its Greco-Roman heritage. Its language was Greek. The Byzantines studied and loved the Greek classics. Every educated Byzantine could quote freely from Homer and from Plato. This love, indeed, ruined Byzantine literature, which never could free itself from the desire to copy classical models. The Byzantines inherited also the quick-witted subtlety of the Greeks, their delicate political realism, and their love of dispute and intrigue. From Rome they inherited a sense of law and administrative efficiency, and high standards of technique and of common-sense that show particularly in their military science and their architecture. But the influence of the East was almost equally fundamental. Greek life and thought had undergone this influence throughout the Hellenistic period, and many Eastern ideas were already part of the Greek heritage. But the strongest Eastern influence came through Christianity. Byzantine Christianity, with its contrasting pomp and ceremony and grim asceticism, and its deep mysticism and other-worldliness, was essentially an Eastern faith. It lacked the disciplined order of the Western Church. Meticulous on minor points of theology, the Byzantine was easy-going and tolerant on many larger issues. But his Church was emphatically a national Church. The Empire was composed of many different peoples and races, but they were all united by their Orthodoxy. Orthodoxy took the place of nationality. This was the main reason for the failure in the later Middle Ages of all the attempts to bring together the Eastern and Western churches. The sense of Orthodoxy, like the sense of their Classical heritage, was very strong with the Byzantines; and both were largely due to the times in which they lived. Throughout those long, unsettled Dark Ages Byzantium was the one constant centre of light. The Byzantines knew it; but they feared that it could not last. Looking back, they saw the great Classical Age, idealized in their memories. Ahead they saw nothing but disaster, till they should reach the life after death. Their temperament was strangely mixed. They were devout and mystical, yet practical and cynical, sensitive to beauty yet callous to suffering; and above all they were pessimistic, showing in this that they were no Mediterraneans but, rather, Asiatics, Anatolians, and victims to the lowering winds that still blow down the Bosphorus from the sad, stormy Euxine.

Christianity was a Semitic religion, deeply tinged with Hellenistic thought. Its asceticism, which at times shows strongly in

Byzantine art, came from its Semitic origin. But its pomp and ritual was derived from another source. The Roman Empire did not comprise the whole of the civilized world. To the East there was the highly cultivated kingdom of Persia, and beyond it, India and China. The foreign trade of the Empire had been almost exclusively with these countries; and it was natural that, when the Roman world grew barren of ideas, fresh ideas should be brought in from the East. The Persian monarch had for long been surrounded with a rich and formal ceremonial. The Roman Emperors, when at last they wished to enhance their prestige, borrowed all these trappings of semi-divine royalty, the jewelled robes and diadems, the processions and the prostrations, the rows of chamberlains and eunuchs. The Church followed the lead of the Court. And so we find the Church and State alike bound up in rigid rules of ceremonial, whose purpose was now not merely to add to the Emperor's glory but to cast over the whole authority of government an atmosphere of mystical ritual and unapproachability that would awe not only the Emperor's subjects but all the peoples of the world. In art this influence was expressed in the glowing backgrounds of gold mosaics and in the rich and subtly varied motifs of decorative pattern. But this orientalism at the Court was in many ways more outward than real. The presence of eunuchs did not, for example, mean the seclusion of women. On the contrary the Byzantine woman, like her Roman predecessor, enjoyed remarkable legal and social freedom. The life of the ordinary Byzantine citizen was freer from ceremony than that of his counterpart in the West; though, on the other hand, his professional activities were closely controlled by the government.

The East made many other smaller contributions to Byzantine life. Constantinople was admirably placed for receiving such influences. From Turkestan came new fashions in clothes, derived ultimately from the mandarin robes of China. From there, too, came the silk-worm, smuggled in the staves of two Nestorian monks. From Armenia came architectural devices, Iranian in origin, that had grown to maturity in the isolated Armenian valleys. From Egypt came knowledge of the applied arts, in particular glass-making and weaving. Every craft and every idea that was of importance in the Eastern world came inevitably to Constantinople.

But, fundamentally, Byzantine civilization remained a Greco-Roman civilization strongly affected by two main Eastern influences, the

Semitic and the Iranian. The relative strength of these influences varied from time to time. No lasting synthesis was ever reached. In the 4th and 5th centuries the civilization was still chiefly Hellenistic, though the new Eastern influences were growing. We see them in art in an increased richness and depth in decoration and at the same time an increased stiffness and impressionism. But there are still many diverse currents. Constantinople is not yet the centre of the world. The older Eastern capitals, Alexandria and Antioch, are still rival centres, the former being even richer and more populous. In the 6th century there is the first synthesis, associated with the name of the Emperor Justinian. We see it exemplified in the great cathedral of St Sophia, a building of a new and audacious design, basically classical but with a vast floor-space and a vast dome of a type unknown before. Its decoration was

very rich but controlled; and no figure mosaics were at first put up. Where we do find pictorial art, it is formalized and growing more severe. Constantinople has now outstripped her rivals. She is acquiring the colour and the riotousness of a huge Eastern city; and the pomp of her Court is notorious. Yet the Empire is still Roman. It is as a Roman law-giver that Justinian is most famous. It was to reconquering the Roman West that he gave his deepest attention. But in his time Greek finally ousted Latin as the language of the Empire. It was still good Greek. The best writers of the 6th century wrote with classical elegance and grace. Nevertheless, so firmly was Byzantium wedded to its Roman past that the Byzantines continued to call themselves Romans and their Greek language the Roman tongue, or Romaic, the Rumi of today.

The 7th and 8th centuries were periods of

(Left) *The mosaic Christ Pantocrator in the dome of the Church of Daphne near Athens shows a blend of the hieratic style of Anatolia with its stern asceticism and the classical style of the Byzantine Golden Age. It was made in the early 11th century by artists from Constantinople. (Right) This icon, known as Our Lady of Vladimir, is one of the most important pictures in the world. Painted in Constantinople in the late 12th century it was sent to Russia where it had an enormous influence on the whole development of Russian art. It is now conserved at Moscow*



Photographs from the Author



Photographs from the Author

(Above) In the small funerary chapel of the Church of the Pammacaristos (the Fethiye Djami) at Constantinople (Istanbul) we see the architecture of the last Byzantine period at its most delicate. (Left) This vigorous manuscript-drawing of one of the last Patriarchs of Byzantine Constantinople, dating from about 1440, shows the debt that Renaissance artists owed to Byzantium

anxiety and stress. The loss of Egypt and Syria to the Moslems left Constantinople more than ever the one metropolis of the Christian world. But it was a sad metropolis. Men turned to religion and to austerity. Seventh-century art is stiff and severe almost to the point of caricature. Its aim was not to create beauty but to frighten the beholder or to tell him a moral story. Life, too, was austere. The defence of the Empire was men's first preoccupation. In the 8th century came the ascetic but anti-monastic movement known as Iconoclasm, which aimed at a simple state-controlled church and which disapproved of most religious art. But the Iconoclast Emperors restored the strength of the Empire; they reorganized its administration and they revived its commerce. The Capital was saved from the Arabs, who were driven out of all Anatolia. Iconoclasm was in the long

run beneficial to Byzantine art; for it purged it of many exaggerations and affectations and prepared the way for a new Classical Revival.

The late 9th, the 10th and the 11th centuries saw the Golden Age of Byzantium. The Byzantine armies drove the Arabs further and further back in Asia, till at last it seemed that Jerusalem itself might be recaptured. In the Balkans the barbarian kingdoms were subdued. Southern Italy was a Byzantine province, though Sicily was lost. The Byzantine fleet had no serious rival in the Mediterranean. Byzantine commerce and industry flourished. Merchants from Italy and Russia and all over the East were to be found in the capital. Literature and, above all, the arts were at their heyday. Culture found a new synthesis. There is less grandiose magnificence than in Justinian's day. Art is more classical, in its sense of restraint and of proportion and in its suitability to the materials employed. This is the period of the most exquisite ivories and enamels and brocades. Mosaic pictures are at the same time serene and intense, with a perfection of technical skill. A new architectural style has been evolved, the Greek Cross building, centralized round its dome, quite unlike anything known to ancient Greece but entirely classical in its logical economy of balance. Occasionally a wave of Asiatic austerity would break in upon this art, encouraged in particular by the active monastic establishments in Cappadocia. A fierce formalism can be seen, for example, about the year 1000, under the warrior-Emperor Basil II, beneath whose rule the Empire reached its peak of glory, but who himself had little liking for the beauties of art.

Too much prosperity ruined Byzantium. Its organization had been created for defensive purposes. It broke down when the Empire became secure; for there was no adequate restraint against the increasingly rich and powerful landed nobility, whose quarrels with the Civil Service of the Capital and with the Church brought chaos into the government at a moment when dynastic problems weakened the throne. It was at this moment, in the 11th century, that the Empire had to face the double attack of the Normans from the West and the Turks from the East. The former were driven back, though Byzantine Italy was lost. The latter, under the Seljuk princes, were able to establish themselves in the most essential province of the Empire, Anatolia. This meant economic disaster. The Crusades eased the situation at first but proved fatal in

the end. The financial supremacy of Byzantium passed to the Italians. Finally, in 1204, the Crusaders, profiting from a fresh period of administrative chaos, threw themselves on Constantinople and sacked it utterly.

Nevertheless the civilization of the 12th century was still high, but a touch of decadence was felt. Western fashions became popular, such as tournaments and love romances. In religion there was a new wave of mysticism and an increased interest in philosophy. In art there was a liking for fantasy and for pathos. We find a graceful elongation of line and a humanistic emotionalism, often very lovely in its results, but lacking the sure taste of the previous age. Constantinople was still a magnificent city, whose wealth and beauty impressed all the world; but the seeds of decay had been sown.

After the Latin conquest Byzantium went for half a century into exile. Small succession-states arose, at Trebizond, at Nicaea and at Arta in Epirus. The Empire of Trebizond lasted on till 1461, somewhat isolated from the rest of the Byzantine world, but rich from its silver-mines and from its control of the Persian trade, and famed for its intellectual life and for the beauty of its princesses. The Despot of Epirus soon captured Salonica and seemed likely to restore Byzantium; but in the end they were outshone by Nicaea, best governed of the Empires in exile. In 1261 the Nicaean Emperor re-entered Constantinople.

But the restored Empire was a shadow of its former self. Its prosperity was gone. The city was half in ruins, for the Latins had been purely destructive. The trade had all been taken by the Venetians and the Genoese, and it was only by selling, disastrously, further trade privileges to the Italians that the Emperors could make any money. The great Balkan kingdoms, Bulgaria and then Serbia, seemed likely at any moment to extinguish the Empire itself, while the more far-sighted Byzantine statesmen watched with apprehension the growing power of the Ottoman Turks. Dynastic quarrels and social revolts further weakened the government, and hastened its decline. The Turkish conquest of 1453, for all the shock that it gave to Christendom, was in fact a release from the long death-agony, an agony remarkable in that it had lasted so long. Yet this feeble dying Empire was the centre of a high culture. At no previous time had Byzantium produced so many writers and philosophers. The former, indeed, with their elaborate affectation of classical style, were not always



I. D. Stefanescu

The spirit of the sacred Dance has survived in Byzantine frescoes and marks the continuity with the pre-Christian past. This example from a village church in the Bucovina depicts Saint Marina, who takes her place among the great figures of the Eastern Church, alongside Plato, Aristotle, Homer, Thucydides, and other representatives of Greek classical culture absorbed by Christianity

successful; but the latter included Gemistus Plethon, the last of the great Neo-Platonists; and both had a strong effect on the forming of the Italian Renaissance. In art too the period was rich. It was a humanistic art, not monumental, but lively and graceful. In these last years of its life Byzantium, reduced as it was to a few Greek coastal cities and to the Peloponnese, was more than ever conscious of its Hellenic origin. Its last homes, Salonica, Trebizond, Mistra and Constantinople itself, resembled old Greek city-states rather than the great Empire of intervening centuries. Yet their citizens called themselves Romans to the end.

The contribution of Byzantium to the sum of world-civilization has been variously estimated. For long it was regarded as negative. But now we are better informed. Constantinople, like all world-capitals, had

an effect that was centrifugal as well as centripetal. Men would flock there from every part, bringing their ideas with them. But in time they would return to their homes, taking with them the ideas of the city, its fashions and its material productions. At the same time relics of the Classical past were preserved in Byzantium. That is to say, Byzantium was not only a storehouse where the elements of Classical culture were preserved, but it was also a factory producing culture of its own to export to all the world. Neither function was much appreciated at the time by Western Europe. Indeed, the larger portion of Classical treasures guarded at Constantinople perished in the Latin sack of the city in 1204—far more than were destroyed by the Turks in 1453—while for most of the Byzantine period Western Europe was too barbarous to make proper use of exported Byzantine culture. Nevertheless we should remember that the vast majority of the manuscripts of ancient Greek authors that we now possess were made by the Byzantines; and that, while the Middle Ages derived its knowledge of Greek literature from Latin translations of Arabic translations of Byzantine editions, the Renaissance was largely caused by the Italians' access to these Byzantine editions and the coming of Byzantine scholars to Italy. Even in the 13th century the extraordinary classicism of the best Gothic art of the time; for example, the sculpture

at Lincoln Cathedral, was due to the travel of Western artists in Byzantine lands. Without Byzantium, our knowledge of Ancient Greece would be purely archaeological. At the same time, Roman Law, which forms the basis of almost every European law-code, apart from the English, has survived owing to Byzantine codification.

To Europe of the Dark Ages, Constantinople represented the height of civilization. The Westerners did not always approve of its refinements. The Byzantine-born Empress Theophano was consigned to Hell by the theologians of Germany for her predilection for baths, while her cousin Maria Argyra, who married the Doge of Venice, was censured even by the Italians for introducing the decadent habit of eating with a fork. But when Early Medieval Britain, France and Germany sought to build up culture, it

was Byzantium that provided their inspiration, either from direct contact, through travelling Eastern monks and merchants and pilgrims from the West, or through knowledge of the provincial Byzantine culture of Italy. Rome and Ravenna were full of the work of provincial Byzantine artists; and the brief efflorescence that we call Carolingian art was principally due to Charlemagne's Italian conquests. Italy was always in close touch with Byzantium, and it is there that many of the finest Byzantine works survive. The mosaics of Rome and Ravenna are well known, though they have almost all been horribly over-restored. More beautiful are the mosaics made by Greek artists of the 12th century in Venetia and in Sicily. Eastern Europe owed everything to Byzantium. The Balkan countries, which in the later Middle Ages were in the forefront of European civilization, were the offspring of Byzantine culture. Later, they developed characteristics of their own. Serbian and Bulgarian art have each their own style; though the loveliest of Serbian paintings, the frescoes of Nerez, are the work of a Greek artist. Five centuries of alien rule retarded the growth of the Balkan countries; but their beginnings had been brilliant, thanks to Byzantium. Russia, too, whose life was likewise interrupted by foreign domination, received almost all her civilization from Byzantium. Indeed, the fantasy and mysticism, so strongly marked in Russian art and in all Russian spiritual life, are largely due to the fact that it was in the 12th century, when such things were fashionable in Byzantium, that the connection between Russia and Constantinople was closest. Even on the East Byzantium left its mark. Arab civilization was largely the heir of the Hellenistic civilization of Syria and Egypt. But it was not ashamed to add to this heritage from Byzantium. The great buildings of the early Caliphate, the Mosque of the Ommayyads at Damascus or the Dome of the Rock at Jerusalem, were built by Christian artists, some of them sent from Constantinople. Byzantine mathematicians and philosophers were welcomed at the court of the Abbasids at Baghdad. The connection between Moslem and Eastern Christian was, indeed, closer than that between the Christians of the East and the West.

Byzantinism has become a term of abuse, to describe a decadent, rigid, corrupt and

bureaucratic system of misgovernment. The Russians today use it to describe the worse features of Tsardom, the Turks the worse features of Ottoman rule. But of recent years the Byzantine contribution has been better valued. To the poet Yeats Byzantium offered a mystical, transcendental release from the "complexities of mire and blood". Byzantium was at neither of these extremes. It was an essentially practical civilization, reinforced with a deep mystical life, nostalgic for the past and pessimistic for the future, but by no means static; and we owe it a debt for all that it conserved and all that it created. It may seem remote from us today. But when we eat our dinner with a fork, or when we attend the Coronation of our King, or when, if we are Scots, we indulge in litigation, we are under an obligation to Byzantium. And when we remember the darkness and squalor of the Middle Ages then we can appreciate its rôle. Today, when the whole world and its great cities are known to us, it is hard to imagine a time when there was only one city where Hellenic and Christian culture defied the barbarians, a city that housed half the wealth of mankind. But to the men of the Middle Ages such was Constantinople. Western knights and pilgrims gazed awe-struck at its marvels. In distant Scandinavia poets sang of Micklegard and its streets paved with gold. And to the Russians it is still Tsarigrad, the City of the Emperors crowned by God.



One of the gracious mosaics which ornament the dome of the Chapel shown on page 400

Icons on Glass

by GRIGORE NANDRIȘ, Ph.D.



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ONE of the most interesting branches of peasant art in Eastern Europe is that of painting on glass. Examples of the art are found in many areas, especially in the mountains: the Alps and the Carpathians.

Icons, representing saints or scenes of the Bible, religious symbols and naturalistic allegorical figures, historic events and popular heroes, or even branches, flowers and fruits, are painted by the peasant artist on the back of sheets of glass. These glass icons stand up better than ordinary paintings to the unfavourable conditions in humble peasant houses, where they bring joy to the eye and happiness to the soul. They are also to be found decorating wayside chapels and shrines.

The painting on glass is a poor sister of the proud frescoes which cover the walls of Byzantine churches in Greece, Serbia, Bulgaria, Rumania, the Crimea and Asia Minor. It is akin also to the Renaissance painting of Italy.

The technique came down through Byzantium to Italy where it was used in Trecento and early Renaissance miniatures. Pieces of painted glass were encrusted in crosses and chests. Icon-painting evolved first in monasteries. From monasteries it was taken over by town and village workshops, where it degenerated into the most primitive form and crude colour. It became the cheapest form of art, suited to the poorest purse.

The centres of production are villages in

the mountains and places of pilgrimage. The means of distribution are the markets, and the pilgrims and pedlars who frequent them.

Byzantine fresco painting evolved in the same way from miniatures in illuminated parchments to the painted glass of mosaics, and then in magnificent wall frescoes.

In their origins the mosaics of Ravenna, the frescoes and mosaics of Kahrie Dzhami in Constantinople, the painted monasteries in the mountains of Bucovina and Southern Rumania, the frescoed churches and monasteries of Mistra, Greece, and Mount Athos, and of Gračanica, Serbia, are related to the peasant art of glass-painting and derive from such sources as the illuminated Gospels of the Syrian monk Rabula, who worked in the second half of the 6th century in a monastery in northern Mesopotamia. All these branches of Christian art set out from the same spiritual home, but their ways and their destiny were different. The same religious feeling found expression in them, but the means of the Carpathian peasant were other than those of the rich Voevodal ruler in the Rumanian principalities, or of the despot, or of the rich and powerful Church prince. But glass paintings fulfil the same spiritual function and were extraordinarily popular among the large mass of believers.

This humble peasant art is charming in its naïveté; its stiff pattern and clumsy execution



Icons painted on glass showing (left) St Elias riding over the clouds and bringing rain to fertilize the furrow turned by the toiling peasant ever since Adam was expelled from the Garden of Eden. The prehistoric plough pulled by oxen is in the background—symbol of the peasant's destiny; in the foreground is the explanation of his hard life: the disobedience of Adam (on the right) in failing to observe the command of God (on the left) not to touch the forbidden fruit (the flower between the two figures). The icon is from the workshops in Nicula, Transylvania. (Right) Pattern for an icon of the Nativity. The sketch is reversed as in a mirror, as the Cyrillic Rumanian inscription shows, to be placed behind glass and copied through. The picture observes the elements of traditional iconography, but about shepherds' life the peasant artist is better informed so he draws the shepherd and his flock as he saw them. The shepherd, very small in the foreground, wears the high fur hat, plays the wooden pipe, and is clad in his ancestral sheepskin coat with the hair outside as you may see him in the Carpathian mountains





(Left) *The peasant is deeply attached to his horse, and it figures in his dreams and fairy tales; he likes to see its idealized figure on the wall of his cottage, helping Saint George to destroy the evil of the world. Saint George is the Saint of the spring, the triumph over death, the hope of overcoming evil and danger ahead, Christian counterpart of the hero of peasant fairy tales told by good talkers at the fireside in the long evenings of the winter. Here he is, on the wall, glittering in his armour, killing the dragon and delivering the Princess just as he does in fairy tales. This icon also is from Nicula, dated 1880. (Right) Another Saint on horseback killing a monster. He is, as the Cyrillic inscription informs us, the Martyr Theodor Tiron. Although the drawing is childish, the expression and the decorative elements give charm and life to this creation of peasant imagination*

express genuine artistic power. While generally the products of this art are cheap objects of trade, sometimes the rustic artist succeeded in expressing himself with power and grace. Some pieces bring to us the freshness of modern expressionism, others are more primitive. The coloured figures on the glass seem to be on the point of making their first movements in order to detach themselves from a prison of inertia. They recall the simple features of an Apollo in primitive Greek sculpture.

The main themes of the art of glass painting follow traditional religious models, but they are of an infinite variety. The drawing is awkward and lacks proportion because the peasant artist reproduced, enlarged or diminished the picture from memory. His per-

spective is that of the 14th and 15th centuries. Byzantine painting is not anatomically accurate or exact. The body, to the artist, is only the expression of the soul. The peasant glass painting, in the Eastern region, is in the manner of Byzantine fresco painting.

And yet another point should be taken into consideration. The technique of painting on glass from behind imposes limitations on the artist. The image is drawn direct on sheets of glass, and to the childish drawing, crude, vivid and sharply separated colours are added.

Sometimes the canons of church iconography were broken and the artist exercised his creative powers on profane subjects. Among the thousands of pictures spread over the area between the Bavarian Alps and the



(Top left, and left) *The Virgin Mary is one of the most popular themes in the workshops of Nicula. Here are two examples from a series of great variety. The beautiful colours enhance the artistic value of the drawings, showing a sincere inspiration in which talent is supported by faith. Believers come to Nicula from far away to buy these examples of peasant art, after, according to an old custom, they have climbed on their knees a holy hill in this place of pilgrimage. (Above) The Martyr, Saint George, killing the dragon. An icon from Poiana Sibiului, Southern Transylvania. The composition, drawing and colours show the skilful hand of a master who may have served as a model for other painters, such as the painter of the first icon shown on the opposite page. Both these icons on glass have an inscription in Rumanian Cyrillics*





(Opposite) *The peasant sense of harmony appears in the proportion of lines and surfaces in this thatched cottage of Northern Bucovina. If it is dark within, because it is primarily a shelter against the cold of hard winters and the rains of hot summers, the icons on the whitewashed eastern walls and the embroidered linen on the beds and benches bring colour, joy and light. The hands which embroidered the fine handwoven linen of the woman's shirt and the rich pattern of her sheepskin jacket are the hands that painted the richly coloured icons on glass in Nicula and other centres of peasant art. Her eyes, which smiled over the cradle of a score of children and grandchildren, have observed the colours of the sky, of the fields and of the woods and used them to reproduce the landscape of the country in the embroideries worked by her hands. The icon on glass, of Saint Catherine, is an example from Slovenia in which Western influence is apparent. (Above) The inside of a peasant cottage. The east guest-room, fully decorated with icons on the eastern wall, serves also as workshop, from which the rhythmic noise of the loom resounds through the village*

Eastern Carpathians, and from Silesia to the Carst, we find images representing local affairs copied from life: historical scenes and figures, illustrations of apocryphal tales (such as the dream of the Virgin Mary), figures from popular books (for example Alexander the Great), heroes and haiduks, or, in Protestant regions, stylized flowers and symbols.

The area in which this peasant art flourished could be divided into two parts according to the influences to which it was subjected. In the eastern region Byzantine and oriental influence prevailed, penetrating as far as the Western Carpathians. The western region developed under the influence of the western Church. The rural character of eastern glass painting is apparent when it is compared with the more sophisticated western painting. The Polish Podhale-Tatra region could be called a dividing point between the two parts.

Podhale is one of the regions richest in painted glass icons; they are of great variety and skilful craftsmanship. Local colour is represented in fighting scenes and brawls. Famous local heroes are immortalized in their national costume, and the fire dance of the Gurals is among the cherished themes of glass painting. Christ is depicted as a fellow-countryman: he looks after lambs in the mountains, churning butter as a good shepherd in his hut. There is no record of local workshops in Podhale. They must have existed however. Further to the west there are known centres of glass painting in the Bohemian Forest and in Silesia.

In the Alps, Sandl, Oberammergau, Murnau, Seehausen are known centres. From here the pictures were brought by pedlars to Austria, Carinthia, Carniola and even further.



I. D. Stefanescu

A Byzantine icon on wood, of the Rumanian school, of the 14th century. Such examples served as both model and inspiration to the humble artist, who copied them, reproduced them, changed forms and elements, striving all the while not to depart from the spirit of the tradition

In the east, Transylvania is a centre of glass painting. From here cheap examples are spread into Galicia and Bucovina, especially among the Orthodox population. (See G. Oprescu's book, *Peasant Art in Rumania*, published by *The Studio* in 1929.)

We find in the little Rumanian village of Nicula in the mountains of Northern Transylvania a medieval atmosphere with painting workshops in the modest peasant houses. The village is a place of pilgrimage, which explains the development of the art here.

Among local themes we find apocryphal illustrations of Alexander's Life, and even

a saint with the head of a Rumanian national hero—Prince Michael the Brave (1593–1601), who united all Rumanian regions—camouflaged thus to deceive the Hungarian overlord. Some pieces produced in these workshops are of real artistic value. For the icons on glass are one of those common, old inheritances which constitute the background of peasant aspiration in this central part of Eastern Europe.

This peasant art, poor descendant of noble origin, has, so far, resisted the destructive influence of modern civilization. But it has to be considered as an art of the past.

A Childhood in Paris

by RENÉ ELVIN

TALLEYRAND in his old age used to say that whoever had not lived in Paris in the years before the Revolution had not known *la douceur de vivre*—the sweetness of life. Those who, like myself, spent their childhood there in the days before the last war, could say the same.

The change that has come over Paris in the past thirty years is not mainly physical. Though the suburbs have grown, the city proper only covers the twenty thousand odd acres that were enclosed by the fortifications built in 1844 and demolished after 1919. Few thoroughfares have been added to the four thousand streets it had a generation ago. The transformation, most striking to one who left the city in which he had grown up to return three decades later, is mainly one of atmosphere.

Of course, Paris had always been a bustling city full of brisk and high-spirited activity. But during the twenty years' armistice one felt there was something unhealthily hectic and alien in the air—and the people. It was as if the cinemas, with their garish importations from Hollywood, had brought at the same time an influx of the get-rich-quick, get-on-or-get-out, devil-take-the-hindmost spirit which has been described as the American way of life.

This gospel of 'rugged individualism', with the ruthlessness and restlessness it implies, was essentially foreign to French nature in general and to the Parisian turn of mind in particular: the war, and especially the epic of invincible resistance and uprising of the capital, have shown that this was but a passing phase, the phase which might be called that of jazz, and has again been superseded by a full symphony.

* * *

When I was a child, my parents moved about a good deal in Paris, and I had thus an excellent opportunity to get to know one district after another.

Let us have a look at a map of Paris, preferably one in which the arrondissements are clearly marked. We see that the first

borough includes both the oldest part of the town—the island of La Cité—and its geographical centre: the Louvre. The inner and older districts are the smallest and gradually increase in size as the spiral unfolds, though the largest is not the XXth, as it should be logically, but the XVth, which, with its 1800 acres in the south-west of the town, occupies the site of the former villages of Vaugirard, Javel and Grenelle.

That geometrical progression follows closely the historical development of the city, which in the Middle Ages comprised only the first six arrondissements, then surrounded by a moated wall built under King Philip Augustus (1165-1223). This rampart was one of the many and ever-widening girdles which Paris, like an aging *prima donna*, twined round itself. The more important of these fortifications are still clearly marked in the topography of the town by the concentric rings of boulevards built, as the name implies, on the site of the old bulwarks.

Gazing at the map, we notice a continuous line of streets that stretches northwards from the international colleges of the Cité Universitaire, where students of all countries congregate. This line runs through five miles of diversely named thoroughfares until it reaches, at the north-east corner of the city, the rather dingy Porte de la Villette, through which Blücher and his Prussians marched into Paris in 1814 and which, 130 years later, saw the Nazis marching out before making their last stand at the nearby airport of Le Bourget. That sinuous thread is part of the oldest commercial highway in Europe. It was through here that, centuries before our era, Phoenician merchants passed on their way to and from Cornwall in their quest for tin, to avoid the long and perilous sea journey around the uncharted seas off the Pillars of Hercules.

On the left bank of the Seine, along the Rue de la Tombe-Issoire and the Rue Saint-Jacques, this row of streets is quiet and almost provincial until it reaches the Latin Quarter and the Sorbonne—the University—where in



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the daytime it becomes as lively as 'the High' at Oxford during term. Then, going down the slope of Mount Sainte-Geneviève, we cross the Seine and come to the Cité, where the ancient road passes in front of the cathedral of Notre-Dame, heart of Paris and heart of France: it is the zero point from which the whole network of French highroads is measured.

Across the northern arm of the river, our Phœnician highway takes the name of Rue Saint-Martin; it is a long commercial street, remarkable only in that it crosses the Porte Saint-Martin, a triumphal arch erected by Louis XIV on the site of the old town-gate in memory of his victories in Holland and Germany. After that, the street becomes more and more industrialized and leads at La Villette to the busy canal of the same name, in the centre of the picturesque Paris dock district. This reminds us, incidentally,

that Paris is France's most important harbour, with a volume of traffic greater than that of Marseille and Rouen put together.

This oldest of all Paris thoroughfares is the true north-south axis of the capital. Intersecting it from west to east and stretching in an almost perfectly straight line from the Porte de Neuilly to the Porte de Vincennes—a

(Top) *Le Pont Neuf*—in spite of its name the oldest bridge in Paris. Adorned with the statue of Henri IV ('good King Henry'), seen on the left, it is one of the busiest crossings over the Seine, and was so, as this photograph shows, even forty years ago. (Bottom) *Les bouquinistes*. For every Paris child from 8 to 80 the embankments of the Seine mean the 'bouquinistes'—the little booksellers where bargains could be got and delightful hours spent—free—browsing among books, prints and stamps



Karl von Scharf



Clive Holland

distance of about seven miles—is the lateral axis. All the world is, of course, familiar with its western part, that masterpiece of town-planning and perspective encompassed by the Arcs de Triomphe de l'Etoile and du Carrousel. But the tourists who throng the cafés, cinemas and shops of the upper part of the Champs-Élysées know little of the delights that were in store for us children in the lower, park-like end of it. There was Guignol, the French Punch and Judy show, featuring the typical bad lad who never failed to bring down the house by the simple means of giving the gendarmes a good thrashing, an exploit which was renewed on the average once every minute. There was a merry-go-round which had not only the universal attraction of all *carrousels*, but was also a test of your skill: you were given a little stick you had to poke at every turn through rings hanging from a stand, and if you got five rings, you won, oh bliss! a beautiful big bar of barley-sugar. There were donkeys for hire, and the place was the central mart for stamp collectors, with minor departments for the barter of marbles and other worldly possessions.

Vendors of toy balloons, hoops, *coco* (liquorice water) plied their trade, but none was more welcome than the *marchand de plaisirs* (the 'pleasure' being a cornet-shaped wafer of which we were all immoderately fond). Topping all these revels was the endless procession of carriages, both horse-drawn and 'horseless', that we never tired of watching.

Compared with these enchantments, the attractions of the Tuileries and Luxembourg Gardens or even of the far-away Parc de Montsouris, 'way down south', seemed to us very small beer, and the Greek elegance of the Parc Monceau was lost on us. The Champs-Élysées were rivalled only by the Bois de Boulogne, the Bois de Vincennes and the Buttes-Chaumont, which had an allure of their own.

The Buttes-Chaumont, laid out in the last century by Adolphe Alphand, the great engineer who created all the parks I have mentioned, were constructed with great skill on the site of old gypsum quarries, the caverns of which were most ingeniously used. There was a 'real' lake, which one could cross



(Left) *La marchande de jouets*, paper toys costing two sous (a penny), which were the delight of children at the time this picture was taken. (Opposite, top) *Les chevaux de bois*—merry-go-rounds—were and are as popular with adults as with children; this gaudy *carrousel*, with pigs instead of horses as mounts, is observed with eager interest by little boys and girls dressed in the fashion of 1900. (Bottom) *La fête foraine*. No 'fair' was complete without side-shows, including, as here, booths of muscular acrobats of both sexes



photographs by Clive Holland





Clive Holland

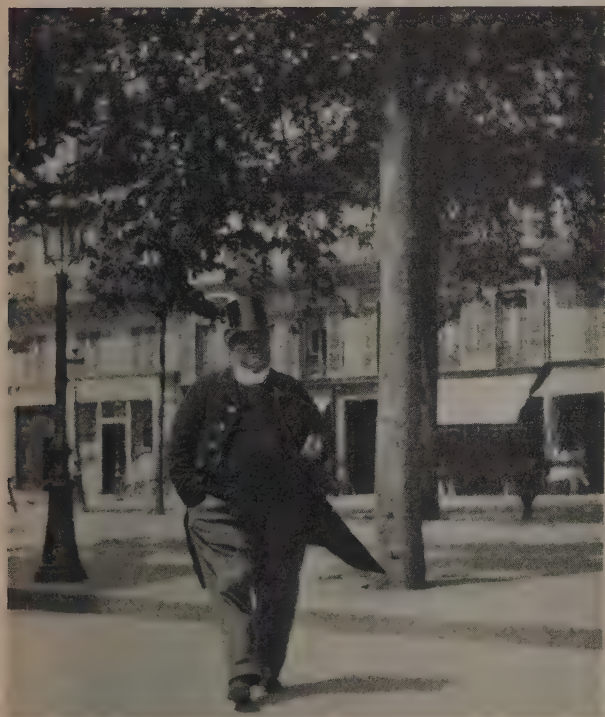
(Above) *Le Jardin du Luxembourg*, gardens near the Latin Quarter much frequented by students, children and Senators, the Senate being housed in the Renaissance building in the background in which the Consultative Assembly meets today. (Below) *La cascade du Bois de Boulogne* was among the many attractions of the Bois and was a much-used trysting-point for lovers and children. (Opposite, top) *Les Halles Centrales*, the central mart since the Middle Ages, is the Paris 'Covent Garden'. (Bottom) *Le cocher*. The Paris 'cabby' wore distinctive dress with bright brass buttons and a tall hat (made of boiled leather and called 'chapeau de cuir bouilli') which was the symbol of his profession



Rischgitz Studios



Rischgilt Studios



Clive Holland

in a tiny ferry-boat to a genuine rocky island 300 feet in height that one could climb up to through dark and mysterious steps and corridors hewn inside the rock, offering vistas over the sheer cliff through cunningly placed apertures. The delicious terror of the ascent was rewarded at the top by a magnificent panoramic view of Paris. There was also a grotto, with stalactites and stalagmites and a waterfall glistening in all the colours of the rainbow.

Paradise Number One, however, was the Bois de Boulogne. It had simply everything: the procession of equipages was as dazzling as in the Champs-Élysées; there was a grotto, a waterfall and a lake where one could hire and row boats; there were wide expanses of lawns to play games and coppices marvellously fitted for hide-and-seek. There were roses and water-lilies in the gardens of Bagatelle, that jewel of a little château built in sixty-four days for the Comte d'Artois as the result of a wager with Marie-Antoinette. It included the Jardin d'Acclimatation, an irresistible combination of zoo and side-shows, with ponies and donkeys for hire, water-chutes, an 'enchanted' river—a little canal on which boats were propelled by a swift artificial current—an Open Air Theatre, with daily circus performances, and, of course, the usual assortment of lions, camels, elephants, seals and all the other inmates of zoos. When we were old enough to take an interest in sport, there were the athletic tracks and lawn-tennis courts at La Croix Catelan, and the thrill of the races at Auteuil and Longchamp.

The Bois de Boulogne had only one drawback: with its 2100 acres it was too much and too big for us; one attraction being as powerful as another, we were almost like Buridan's proverbial ass who, placed between two haystacks in every respect equal, starved to death because he could not decide which to tackle first. Besides, we lived mostly in districts far away from this garden of delight, and to get there, in the days before the *Métro* made the journey quick and easy, was quite an expedition, though a pleasurable one, and cut deep into the day.

At the eastern end of Paris, the Bois de Vincennes, less fashionable than its counterpart in the west, had advantages of its own: it had no less than three lakes, a stadium and a cycle-racing track which not only offered—free!—bicycle races every Sunday, but also allowed any cyclist with sixpence in his pocket to pedal on the wide, banked cement track, shoulder to shoulder with the revered heroes of the Sunday races. On its southern side

(Right) *The legendary Moulin de la Galette had actually been for ages, and until early in the 19th century, a real mill where wheat grown in the suburbs was ground. The reconstructed barn has since become a notorious music-hall. (Below) This romantic-looking 'pub', 'Le Lapin Agile' (a pun on the name of the proprietor, Gille) was, in the days before the last war, the rendezvous of young writers and artists, many of whom have since made their mark and celebrated nostalgically the days of their gaily misspent youth*



Before the last war Paris music-hall posters followed a rigid tradition, only occasionally interrupted by the impact of a genius like Toulouse-Lautrec, who temporarily raised them to the height of works of art, much in demand today among collectors. Otherwise, craftsmen knew what their clients and the public expected and were content to give them just that



Photographs by Clive Holland

Rue St. Vincent. Up to the last war, there were in many parts of Paris, and there can be found even now, quiet backwaters which are as remote from the bustle of the big city as if they belonged to another century. Here is one of those old-world countrified streets on the slopes of the Butte-Montmartre





Clive Holland



L'Avenue de l'Opéra and the Arc de Triomphe half a century ago. Note the comparatively sparse traffic in the very centre of Paris and the almost deserted Arc before the district became commercialized

flowed the Marne, paradise of swimmers.

I may have given the impression, too common among foreigners, that Paris was nothing but one vast pleasure-ground. In fact, in spite of superficial appearances, Paris is probably the hardest-working town in Europe. In this respect it is as thoroughly organized as any big business concern, with the *arrondissements* taking up the function of the departments of a large store.

The Ist and VIIIth *arrondissements*—Rue de la Paix and Champs-Élysées—comprise, as everybody knows, the smart luxury shops, the famous dressmakers who lay down the law to the fashionable world, the glittering exhibition rooms of motor-car manufacturers. They are the show windows of Paris and, indeed, of France, a fifth of whose industrial output is sold in and through the capital.

The IIInd *arrondissement* is the Stock Exchange and banking district, and also manufactures *passementerie*; the IIIrd, covering the ancient grounds of the Temple Priory, is today given over to fancy jewellery and to what are called *articles de Paris*: buckles, toys, leather goods, artificial flowers, etc. In the IVth *arrondissement*, the Faubourg Saint-Antoine has been devoted for the past 700 years to the making of furniture and is still the main centre of that industry in France; the VIth—the Quartier Latin—is the district of publishers, booksellers and art dealers; the IXth is largely an emporium of the textile industry; so many German commission agents and middlemen were concentrated in the Xth that, before the last war, it was nick-named Bocheville, which was less than flattering for the numerous dealers in china and porcelain goods who also made it their headquarters.

The XIth *arrondissement* is the centre of the plumbing and building trades. Leather industries, notably tanning, have been

grouped since the 13th century along the little river Bièvre, now—like the Fleet river of London—ignominiously covered up and serving as a sewer, but still forming a distinct industrial quarter of the XIIIth *arrondissement*. The XVth is notable for its chemical works, where Javel water was first manufactured in the district of the same name. The XVIIth has many bicycle and motor-car factories. Heavy industries are to be found mostly in the outer districts and in the large suburbs whose names have become sadly familiar following the necessary raids of the R.A.F.: Billancourt, Asnières, Courbevoie, Levallois-Perret, Clichy, Issy-les-Moulineaux.

Unknown to the casual tourist, Paris is a great industrial city, the most important in France. And yet, between the hives of industry and the bustle of the boulevards, one can find self-contained provincial villages seemingly lost to the world around them. They may be discovered especially in the VIIth and XVIth *arrondissements*, along ancient, winding streets of small houses with lovely gardens hidden from view by high walls. The whole of the aristocratic Faubourg Saint-Germain, with its dignified old-world mansions, is one of those quiet backwaters curiously remote from the present day.

It is perhaps this very diversity that has made Paris the capital of the world as well as of France, for in this infinite variety there is stimulation for everyone, whatever his origin. For centuries it has been the metropolis of artists from all over the world, the city above all others whose consecration and approbation they sought. In the Middle Ages, the Sorbonne was the centre of attraction for students of all Europe. It has been said that every man of culture has two home towns—his own and Paris. This has always been true and is likely to remain so.

Six Years on a South Sea Island

by A. W. BAIRD

FRENCH OCEANIA lies south of the Equator, half-way between Central America and the Australian continent. It embraces five archipelagos and covers an area roughly equal to a triangle drawn between Bristol, Belgrade and Oslo. Oceania rallied to Free France on September 2, 1940, and many of its inhabitants have seen service with the 'Bataillon du Pacifique' in the European theatre of war.

The majority of the islands are mountainous; the peaks, according to one theory, of a vast continent now sunk beneath the ocean. There are also many low atolls, coral rings enclosing lagoons; the amazing creations of the polyps.

I lived for six years in the islands. For the first four I led a comparatively rich man's life, renting a house in Moorea, a high island separated from Tahiti by a stormy channel nine miles wide. It was a comfortable roomy house built in European style. I hired a motor-launch which not only enabled me to indulge in the expensive sport of sword-fishing, but also obviated the discomfort of the passage across to Tahiti in the slow cramped schooner that plies thrice weekly between the islands. I had friends to stay, tourists from Europe, passengers from visiting yachts. Fishing, swimming and elaborate picnics occupied our daytime. In the evenings we played cards. It was a pleasant happy-go-lucky existence.

It was not, however, until I spent two years in the islands with considerably less money, the last two years before the outbreak of war, that I discovered the real charm of the place.

During my more affluent days I had rented a piece of land on a thirty-six-year lease: twenty acres of shoreline forming the eastern entrance to the Bay of Papetoai in Moorea. It was there that I returned in 1938.

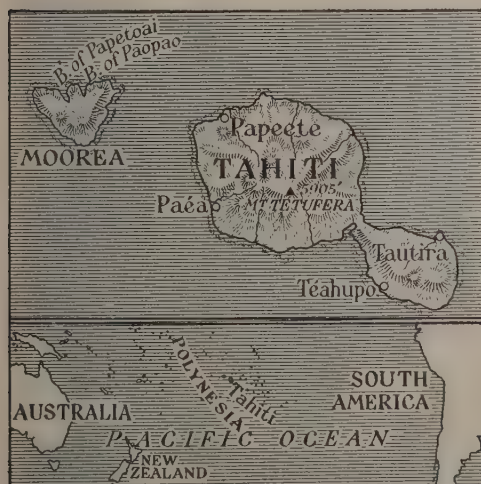
Moorea, a mountainous island, is encircled by a coral reef. There are two great bays on its northern shore, the Bay of Paopao and the Bay of Papetoai, the sunken craters of extinct volcanoes. A flat narrow strip of land, thickly planted with coconut trees, separates the base of the mountains from the lagoon. The escarpments and ridges, their lower slopes a mass of dense vegetation, cut a fantastic jagged outline against the sky. More often than not the summits of the mountains are draped in the voluminous folds of the trade-wind clouds that continually drift across the Pacific. From the ends of the bays broad valleys, scored by streams whose origins appear as thin white ribbons of cascade high up amid the rocky peaks, stretch up into the interior of the island.

The inhabitants now live on the seaboard although there were once large inland settlements, the ruins of which are almost overgrown by the brush.

Every piece of land in the islands bears a name. My particular point was called Tahiamanu. When I first settled there it was a mere twenty acres of coconut plantation with a good fresh-water spring welling up among the rocks in a tangle of vegetation at the foot of the mountainside.

First I had to set about building a house. I decided to build in the native style: that is to say, a wooden house with plaited bamboo walls and palm-thatched roof. From my previous stay in Moorea I knew many of the villagers, and had soon assembled the necessary team of workmen. Planks for the flooring and nails were the only building materials that had to be ordered from Papeete. The remainder were home-grown.

For many days the men were going to and fro between Tahiamanu and the valley, fetching timber for the posts and supports, and stacks of bamboo for the walls. Their women-folk sat plaiting the dried coconut fronds for the roof, and weaving the slatted strips of



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(Above) *The Bay of Paopao in the Island of Moorea. Captain Cook anchored here when visiting Eimeo, as the island was called in his day. The jagged outlines of the mountains show their volcanic origin. (Below) A characteristic South Sea island house that can be built at small cost using local material. The walls are of bamboo, the roof of thatched pandanus fronds. (Opposite) Horses were first brought to Tahiti by Captain Cook. The Tahitians take their horses for a bathe in the sea water after exercise*



bamboo. Soon the house began to take shape. To pipe the water down from the spring was an expensive proposition, so we merely enlarged the pool, covering the sides with a layer of cement, while the men and women worked at the house. I collected cuttings of hibiscus of various forms and colour to plant as a hedge on either side of the road that ran through the property on its way round the island.

When the house was nearing completion I took the schooner over to Papeete to purchase the few necessary furnishings that could not be home-made: a bed and mattress, a primus-stove, a few pots and pans. The men had knocked me up a couple of adequate tables and a few chairs.

As the little schooner carrying me back from Tahiti chugged up the bay I was enchanted at the sight of my new home.

Certainly one could hardly have found a more beautiful setting. The broad bay lying within a semicircle of wild mountains, the rich greens of the vegetation, the crystalline colours of the lagoon, and, set back only a few yards from a strip of shimmering sand, my house with its greeny-yellow walls and bristling brown roof.

Tavi, the foreman of the working party,

had suggested that his son, Terii, should stay on at Tahiamanu to help me. Since I had decided to live, as far as possible, "off the land", which in the islands implies "off the sea", and since I myself was as yet very unskilled in the local ways of fishing, I readily accepted this offer. As time passed, Terii proved not only an excellent fisherman but also an amusing and intelligent companion. Through him I learnt to understand Polynesians, appreciate their way of life, and in fact discovered the charm of the South Seas.

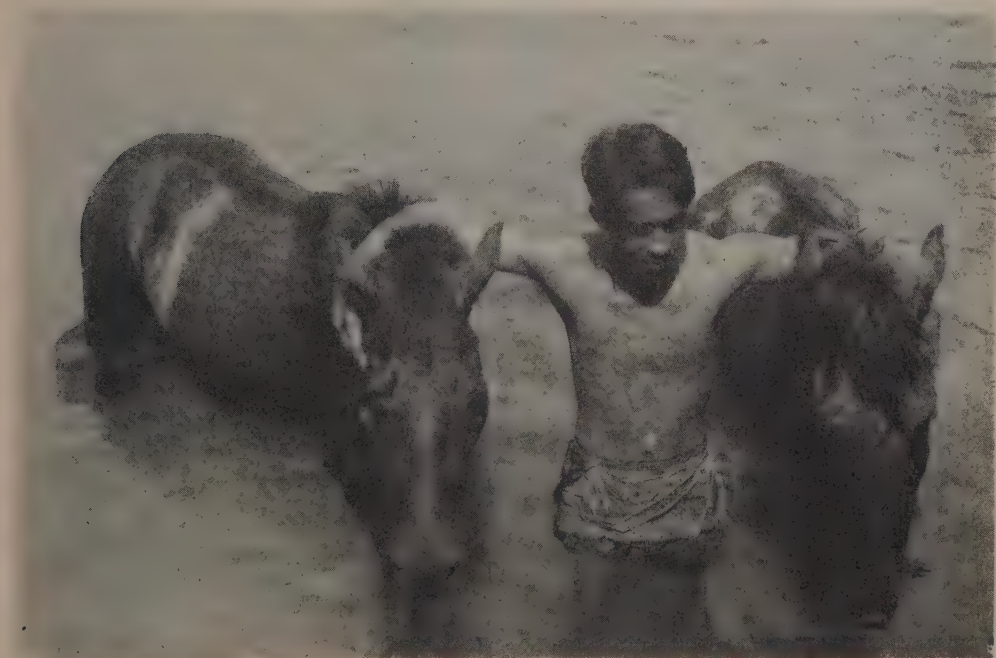
The day before I was to move in, Terii and I paddled the canoe across the bay to the village. At the Chinese store we stocked up with groceries. The Chinese have almost a monopoly of the commerce of the islands. Every village has one or two Chinese stores where the usual provisions are sold. The Chinese are also the bakers, and twice a day at fixed times the Chinaman's cart, loaded with French rolls and a selection of groceries, will pass the house on its rounds. The Chinaman announces his presence by blowing a conch shell. No one ever seems to own a clock, at least not one that goes, so that the sound of the conch is useful as a vague indication of the time of day.

The setting-up of a home in Tahiti always calls for a celebration. The truth is that Tahitians will seize on any excuse for a party. I duly had my house-warming.

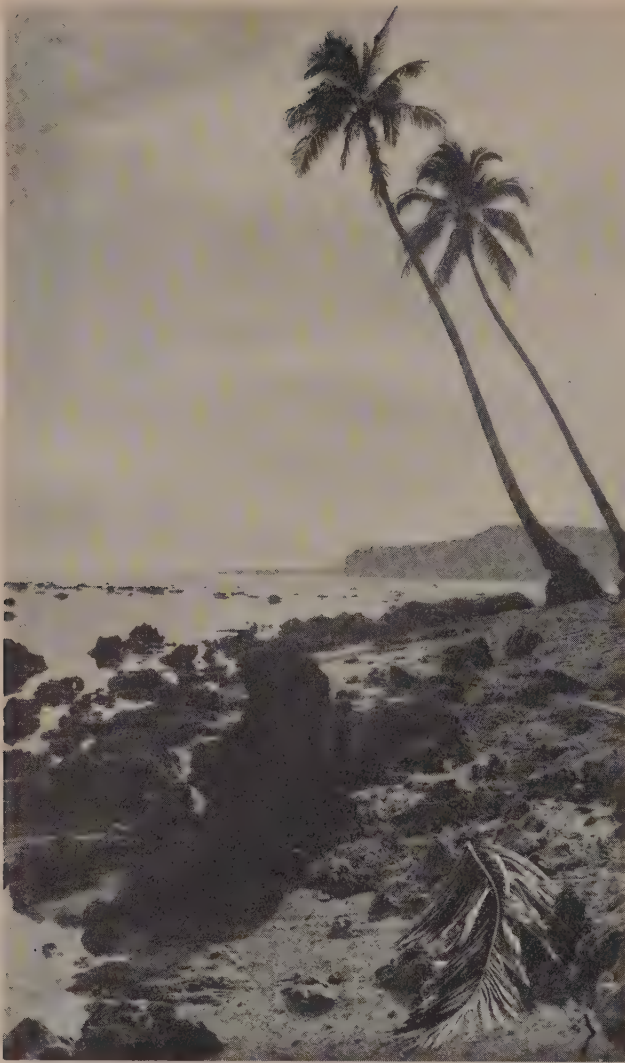
Early on the morning of the party Terii's family paddled across from the village. A Tahitian party entails a great deal of work. Boys were sent up the valley to catch freshwater prawns. Girls went out to the reef to gather clams and salt-water snails. Some of the men were out with a net in the lagoon. Others were cleaning the pig and the chickens, digging the pit which serves as an oven and cutting drinking goblets from the bamboo-stems. The women were plaiting leaves together to make plates, and weaving garlands of flowers.

By the late afternoon the preparations were well in hand. The food, pig, chicken, fish, curried prawns, sweet potatoes, bananas, plantains and *poi* (the Tahitian sweet) had all been moistened with coconut-cream sauce, wrapped in packets of young banana leaves, and laid in the pit, on a bed of heated stones. The pit had been closed. There was nothing more to be done until it was time to open the pit, unwrap the packets of food and lay the contents on the table. The 'table' consisted of several lengths of planking only slightly raised from the ground, with a tablecloth of flattened banana leaves, laid on a clearing near the seashore.

Towards dusk the guests began to arrive, some on foot, some by canoe. Most of them had brought me a present. A bunch of bananas, a basketful of eggs, a couple of



Photographs by the Author



A beach on the northern shore of Tahiti, where dead coral heads emerge above the still waters of the lagoon

chickens or a tiny squealing pig. The women wore their best cotton frocks; the men were dressed in white duck-trousers and coloured shirts. Everyone went barefoot and everyone wore a wreath on their head. The men preferred wreaths made from twisted leaves of scented fern; the girls had garlands of gardenia and frangipani flowers.

As the meal drew to a close, the guitar players began to tune up. The table was taken to the water's edge and the remnants

of the spread thrown into the sea. The music had started and the diners now moved back, clearing a space for the dancers. The Tahitian *upa-upa* has much in common with the Hawaiian *hula* but is more vigorous, less sinuous and perhaps more blatantly provocative. It has a wild, intoxicating appeal.

My guests danced and sang all through the moonlit night. One by one the demijohns of Algerian wine were emptied. When the dancers grew tired they would form a group around the guitarist, and with one of them taking the solo part, and the rest forming the chorus, they would sing the *uté*, long narrative ballads that, in a strange purely Polynesian musical idiom, recount the exploits of the ancient Maori people. At dawn some of the party were still there clustered around the guitar player. Others had fallen asleep, curled up in the sand. It had been a good party and now my life at Tahiamanu had begun.

How quickly the livelong day slipped by! How much I learned during those months! Not only about Tahitian life, but about myself.

There was enough work to be done at Tahiamanu to keep Terii and myself fully and pleasantly occupied. Each day, to begin with, we had to go fishing for the larder. Fish abound in those waters. Beyond the reef there are swordfish, sailfish, dolphin, tunny and bonito; within the reef, barracuda, pompano, cavally, groupers and snappers. All varieties of coral fish. There are also crayfish, crabs, oysters, clams

and mussels. And in the rivers fresh-water prawns, the size of small lobsters. To catch each of these varieties of fish there is a different method. Fishing in the island may mean trolling behind a boat or a canoe, either with a hand-line or a stocky bamboo pole; standing on the reef amid the foaming surf to hurl a seven-pronged spear at the fish as it appears for a few seconds in the glassy water of the wave before it breaks; diving and swimming through the coral heads, peering



The native canoe, hewn and hollowed from the trunk of a single tree. An outrigger with a strip of wood resting on the water helps to maintain the balance of this frail craft

at the fish through water-goggles, and using a long single rapier-like spear to pinion them against the rocks; going with a band of fishermen from the village to set the big communal net into which the fish are driven; casting a fly made of cocks' feathers from a tapering bamboo pole with a snapline; wandering along the lagoon's edge with a throw-net in search of fish that have come to bask in the shallows; spearing fish at night, balancing on the prow of the canoe, a flaming torch of dried palm fronds in one hand, a spear in the other, while the boy with the paddle propels the craft silently through the darkness. The ways and means of fishing in the islands seem almost infinite. And all this fishing depends on the time of year, the direction of the wind and the season of the moon.

As far as possible I wanted to be self-supporting, and with this end in view I hired Terii's father and elder brother to help us clear a few acres on the mountain side of the road near the spring. The ground there was moist and fertile. We planted banana trees, papayas, melons and pineapples. We also worked at a small vegetable garden, but without much success for the rats and land crabs ate up the first shoots as soon as they appeared. These pests make gardening in the European sense of the word impossible. The hibiscus hedge that I had planted was thriving and I now set about collecting cuttings of flowering shrubs and larger plants that were big enough to withstand the onslaught of rats and crabs.

I planted gardenias, mock-orange and frangipani at random all over the property. I set plants of bougainvillæa and jasmine against the walls of the house. Where the overflow from the spring seeped its way down to the sea, making the ground soggy, I arranged great clumps of various coloured cannalilies and filled the pools with water-hyacinths.

Once every three months we "made the copra". Copra-making is a fairly simple task. The fallen coconuts are collected in piles; any that are ripe but still on the tree are pulled down by means of a long bamboo pole with an iron hook on the end. Dodging the falling coconuts is a tricky job, for a ripe coconut falling from forty feet is a formidable missile. When the coconuts have been collected they are split open with an axe and left for two or three days to dry. The white meat that forms the kernel of the nut is then scooped out and carted to a drying-shed where it is chopped up and left in the sun for a further period. It is then sacked and shipped over to Tahiti. Copra, from which a valuable oil is extracted, is used in the manufacture of soap and various other oil products. The money I earned on my few sacks of copra more than paid for the rent of the property. Copra, vanilla, mother-of-pearl and phosphates are the chief resources of French Oceania.

Anyone forming an impression of the South Sea Island landscape from the paintings of Gauguin, the late 19th-century French artist, who, disgusted with European civiliza-

tion, went to seek happiness in the primitive life of the Marquesas, will tend to be disappointed by the reality. In Gauguin's pictures there is more than a suggestion of lush jungle splashed with vivid colour. Such scenery is in fact surprisingly and disappointingly absent. Tahitians are fond of flowers and surround their houses with hibiscus, gardenias, cannas and bougainvillæa. Away from the villages, however, along the narrow seaboard the eye meets little but the elephant-grey of the coconut-trunks and the brown of the fallen fronds. Even the interior of the islands although thick in vegetation is remarkably untropical in appearance. The hills are covered in bracken, and the valleys, for all their wealth of trees and ferns, might form part of some European landscape. No brilliant flash of wings, no furtive animal movement, disturbs the green gloom where the stone terraces of the ancient shrines now lie overgrown and abandoned.

Cattle, pigs and goats, imported by the early explorers, until fairly recently ran wild through the mountainous islands, but they are fast disappearing. There are wild chickens in the valleys and in some places a species of wood dove. There is also a breed of small indigenous duck. Scorpions and centipedes abound but there are no snakes.

It is the lagoon that is the jungle of Polynesia. There, amid forests of coral, life teems in a welter of colour. Through the undergrowth of this subaqueous world a wild life as weird and wonderful as that of any jungle, prowls, writhes and flashes: marine creatures, monstrous and minute, harmless and deadly.

Amid the brittle fern-like foliage of the living coral flicker myriads of tiny jewelled fish, brilliantly coloured. Sea anemones stirred by the swell wave their plummy tentacles. The prairies of sandy ocean-bed are strewn with starfish, sea-cucumbers, wind shells and giant whelks. There are great beds of glittering black sea-urchins with spines eight inches long. Here in the shallower waters the smaller fish, the ocean butterflies, browse amid the weeds. Scorpion and butterfly-fish, angel-fish, cowfish, lion- and leopard-fish, dragon-fish. In the dark crevice of the coral live school-masters and squirrel-fish. As the water grows deeper the living creatures become larger, more vicious; parrot-fish and trigger-fish flash their wonderful colours. Giant clams and pearl-oysters are wedged into the walls of the reef. Angler-fish with monstrous mouths guard the entrance to the caves where colonies of crayfish have their lairs. Huge morays squirm

around. In the shadowy waters of the deep, of which the natives have some dread, whip rays flap their way like gigantic bats, great blotched octopi shamble round in search of their prey, barracuda streak by in a flash of silver, and blue sharks nose greedily about. This is the South Sea jungle, these are the hunting-grounds of the Polynesians.

Through Terii, as I have said, I grew to know and understand his people. Tourists are more than apt to judge Polynesians by the natives of Papeete and the surrounding districts where European influence often shows regrettable results. Such judgment is both superficial and erroneous. Equally foolish is it to idealize these people. The Polynesians are a simple, warm-hearted, pleasure-loving race. Their morals may not conform to the standards of the 'civilized' world, but crime is remarkable for its absence. In the native courts there are few cases of theft, and murder is practically unknown. By general standards the people are healthy and clean. The diseases from which they have suffered most, and still suffer to a lesser extent, tuberculosis and venereal disease, occurred as a result of contact with the civilized world. Such epidemics as measles and influenza, to which they have not the same degree of immunity as the whites, can prove very serious. But the majority of diseases associated with the tropics, cholera, typhus, dysentery, are almost unheard of. Malaria-bearing mosquitoes do not exist in the islands.

Although there is little material evidence of their remarkable history from the time they emigrated from Malaya in fleets of canoes to colonize the islands of the Pacific, the Polynesians have a singular sense of tradition, and a resulting social poise that raises them well above the standards of primitive people. They are bound together by strong family ties and no Tahitian ever goes in want. Their kindness and generosity is traditionally extended to strangers. If they appear lazy, it is because they have no need to work. Poverty, as it is known in Europe, is non-existent. With a minimum of labour no one need go hungry. Thanks to the climate few clothes are necessary. Nature has made life so easy that the islanders see no point in sweating their life out for the sake of a few francs.

It was with deep regret that I left my island home soon after the outbreak of war. I had enjoyed my last two years living in the simple native way, far more than the previous four that I had spent there. My life had been vigorous, healthy and full of interest.



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The New Mobility

by GEORGE H. T. KIMBLE

War is always a forcing-house of technical change: what are the technical changes due to this war which will most deeply affect our lives in the years of peace? Professor Kimble, who has served throughout the war in the R.N.V.R. and has just been appointed Head of the Department of Geography at McGill University, Montreal, suggests that one of the most significant is the enormous increase in the power of getting from one place to another, often hitherto considered inaccessible, by land, sea and air. His theme is: "Man's parish is henceforth the world"; and he sketches some of the implications of this profound revolution in life on our planet

QUITE recently, with little more fuss and trouble than it takes to travel round the British Isles, I flew round the world—across three oceans and four continents, 40,000 miles in all, in under twelve days' flying time. The greater part of this flying was in commercial planes, running regular schedules and keeping to them with a fidelity that railway companies might be proud of. Some of the transcontinental routes are over territory which was practically unexplored until a couple of years ago. In the Sudan and the 'Hump' country between India and China alone more than a dozen airfields have been carved out of virgin

forest and bush since 1942 to enable 'Lend-Lease' goods along the world's longest supply line—from Chicago to Chungking. Around some of these fields towns have already sprung up which may easily become focal points in the post-war network of world airways.

Throughout the Pacific theatre the development of flying has been equally rapid and impressive. In Honolulu I examined a wall-map showing the network of trans-Pacific air-lines and giving the hour-by-hour position of all air-borne traffic along them: the congestion on some of these lines was so great that the flight-control officer had his work cut out

The Ocean Shrinks

800



838



o-day



Each wave represents one day of travelling between the U.S.A. and Britain

From 'Only an Ocean Between'. Harraß

ISOTYPE

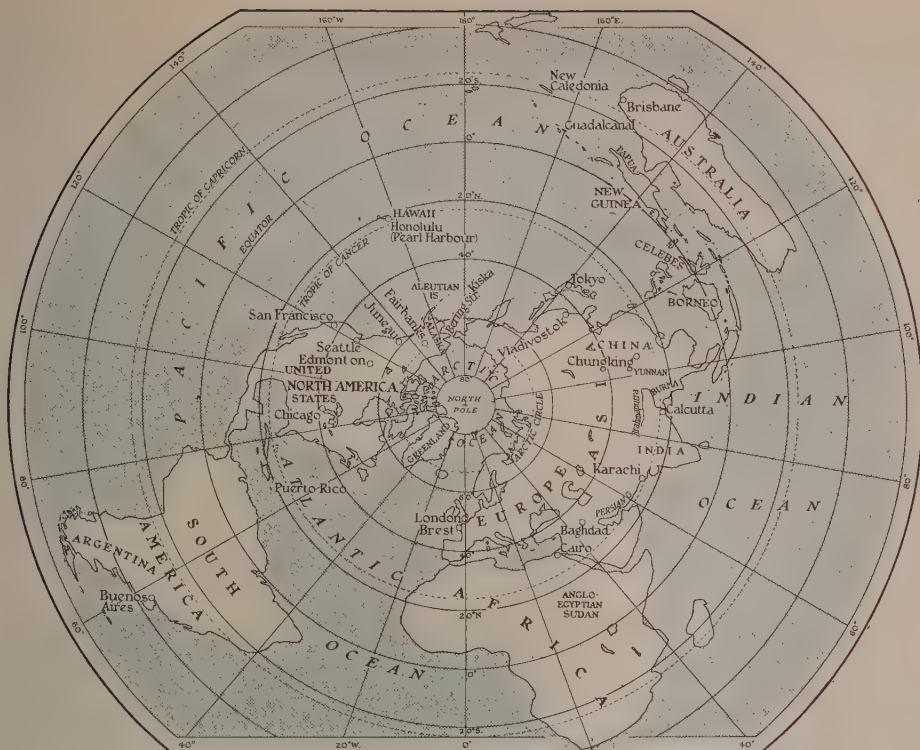


to prevent collisions. Exactly where these lines start and finish is still, for the most part, a military secret; but there is no secret about the rôle which many an erstwhile insignificant island is playing in their maintenance. One such island is a coral reef which up to 1939 was so isolated from the main steamship lanes, so small and poorly endowed and waterless, that the rival claimants for its possession had not bothered to settle the question of sovereignty. Today it has an airfield and a seaplane base that between them can accommodate everything that flies; its traffic schedule bears comparison with Croydon's just before the war, while its transit camp facilities run to an open-air (twice-nightly) cinema, refrigerators and flush water-closets. More important, it has an absolutely clean flight record—no small achievement when you realize its nearest neighbour is the best part of a thousand miles away and that flying in the tropics is subject to serious hazards.

Equally important has been the airways expansion around the continental fringes of the Pacific: this expansion is largely explained by the fact (illustrated on the map shown opposite) that the shortest way from San Francisco to Tokyo is via Seattle, Alaska and the Aleutians. How many of us had heard of

Juneau, Fairbanks and Kiska before the Japanese attack on Pearl Harbour? From being one-horse townships they have become, almost overnight, strategic aerial stepping-stones to the Far East, comparable in importance to Cairo, Baghdad and Karachi on the British Overseas Airway's route.

But it is not only in aviation that giant strides have been made in the shortening of world communications: the accomplishments of military road-builders in the past four or five years have been no less substantial. In North America a 1600-mile road—the Alaska Highway—now connects the Canadian prairies at Edmonton with the arctic meadows at Fairbanks just short of the Bering Straits. In south-east Asia a new motor road has been thrown across the 'Hump' east of the Brahmaputra to open up the rich, hitherto all but inaccessible lands of upper Burma and Yunnan. In China itself so many thousands of miles of new highways have been built since 1937 that before the war is over it should be possible for lorries to run from, say, Vladivostok via Chungking and Calcutta to the Persian Gulf. In fact, with the Alaska Highway and the new Pan-American Highway linking the Argentine and the U.S.A., it will soon be possible to travel by road from



Buenos Aires to Brest with only one short ferry journey.

Also of great significance is the road-making throughout the islands of the south-west Pacific. In place of tracks, generally impassable in the rainy season, well-graded, macadamized highways (I can testify to their good quality in Guadalcanal and New Caledonia) are being engineered across swamps and mountains which until a year or so ago were the last refuge of cannibalism.

The meaning of this new mobility is plain enough. Distance, and its corollary, isolation, are in a fair way to being destroyed. Just how fast was vividly brought home to me during my trip. Of course there is nothing very startling about going round the world in eighty days. What was startling, to me at any rate, was the fact that, in terms of flying time, few parts of the world are now more than three days' journey apart. The Atlantic is a mere ten to twelve hours' wide (considerably less if you fly across it in a 'Mosquito'), while the formerly 'limitless' Pacific can be traversed inside forty-eight hours: you can have breakfast in San Francisco and dinner in Brisbane on the following evening. Or again, whereas it used to take two months to go from Chungking to Calcutta by caravan, rail and

steamer, the journey can now be made by air twice in a single day. Even these times are certain to be improved upon in the near future, for speeds in excess of 500 miles an hour have already been attained in test flights. If and when these become commercially practicable, air passengers from London to Alaska travelling via Greenland will have the exceedingly novel experience of seeing the sun move backwards across the heavens, for they will then be exceeding the earth's spinning velocity in those latitudes.

The human and economic implications of this new mobility are as notable as the physical fact itself. With the world at last shrinking to homely proportions, nationalism in the sense of economic self-sufficiency and isolationism becomes an anachronism. The problems of a world knit together by air-lines, not to mention radio and television, demand a supra-national approach, one that transcends cultural, racial and physical frontiers, even if it does not ignore them. Frontiers, whether political, ethnic, economic or psychological, tend at the best of times to be troublesome features of the human landscape: they have become accepted simply because the men who lived behind them were immobilized, either by serfdom, traditional attachment to the soil,

or by ignorance of what lay beyond them. When four miles an hour was the normal rate of progress and "beating the parish bounds" was the extent of the ordinary countryman's travels, there was good excuse for parochial thinking. But not nowadays when 400 miles an hour is possible. Man's parish henceforth is the world. There never was a time when so many men were travelling so far or learning so much about their fellows. And this applies equally to the peoples of the East and West whom the fortunes of war—Kipling's prophecy notwithstanding—have thrown into the closest possible association. The results of this association are worth pondering.

In the first place, on the westerner's side there is undoubtedly a growing respect for indigenous culture and moral quality: many an allied airman owes his life to the skill of the native tribes of New Guinea, while U.S. and British soldiers who have fought alongside them in Northern Burma cannot speak too highly of the fighting spirit of the Indian and Chinese troops. Out of this enforced inti-

macy a greater insight into oriental aspirations has been born. Thus many men are seeing, for the first time, that something more than a formula is needed to answer 'the India question'. At the same time residence among the peoples of India is helping to produce a more realistic outlook on imperial responsibilities: so far from condemning British rule (as they are generally supposed to do), a surprising number of Americans are beginning to ask themselves whether, in the light of their none too successful achievements in Hawaii and Puerto Rico, they themselves would have done better.

Secondly, wherever the war has gone, it has affected the outlook and economy of primitive societies. Papuans who, before 1941, had not so much as seen a bicycle, now know as much about jeeps as most Englishmen. New Caledonians who a few years back could not tell which way up to look at a photograph, now laugh at the latest comedies from Hollywood. More important still, throughout the Far East millions of men and women have, for



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"Distance, and its corollary, isolation, are in a fair way to being destroyed". A striking illustration of the truth of this was disclosed in an Air Ministry announcement that R.A.F. Sunderlands had been used to carry supplies and reinforcements to British troops operating behind the Japanese lines in Burma. Their 'base' was a lake in the jungle, hitherto the exclusive preserve of aboriginal tribes

a time at any rate, cut loose from their traditional home and occupation to live a semi-nomadic life working on Government contracts. Two of the commonest sights the traveller in India sees today are the huddle of diminutive, portable straw-plaited huts round airfields under construction, and the never-ending stream of people tramping the roads in search of casual employment.

In Africa a rather similar trend has been in evidence for several years, though it has certainly been strengthened by the war. At first sight it seems incredible that a major result of the impact of Western culture should be the establishment of a permanent floating labour corps. How can a continent, so rich in natural resources and only now entering into the full possession of its heritage, possibly be faced with a problem of this kind? On reflection it becomes more intelligible: for while the bulk of Africans remain deeply attached to their own soil and their primeval life, this does not provide them with the ready cash required for the payment of their taxes, the honouring of their tribal obligations and the gratification of their desire for imported articles.

What the result of this impact of East and West will be, none can tell; but three things are clear. In the first place, the task of colonial government is not going to become any easier. True, its agents will be able to travel around more quickly and reach more people in a given time, though that will not necessarily make them better administrators, but so, too, will the agents of nationalism and the many other 'isms' which raise their voices against the "tyranny of foreign domination". Prejudice against occidental culture and religions must therefore be expected to increase. It is significant that Indians, thanks partly to their newly realized propinquity to the Chinese, are now turning their attention eastwards far more than they did twenty years ago. At a recent conference of educationists fundamental changes were discussed which would bring into the curriculum of Indian schools the compulsory study of the Chinese language, history, geography and culture.

In the second place, it is unlikely that even the remotest communities will relapse into the comparative savagery of pre-war days. Having acquired a taste for wireless sets, iron bedsteads, umbrellas, bicycles and chewing gum, the South Sea islander may reasonably be expected to demand more, rather than less, contact with the outside world—a point of view which we may expect American and European business houses to do their best to encourage. Indeed, I heard a naval officer prophesy that as soon as the war was over

landing craft would be converted into mobile department stores plying wares, from scented soap to sewing machines, among the reefs and islets of the western Pacific. No doubt it will be difficult to 'sell' air-travel to these islanders, but that does not mean air-lines will not continue to be operated throughout the region. For one thing, so much money has already been sunk in the aircraft industry and so many hundred planes and airfields will be available for conversion to peace-time use that no nation interested in preserving its prestige would scrap aviation simply because it did not seem likely to pay. (From their inception all 'commercial' air-lines have been subsidized by their governments.) For another thing, political considerations will demand the maintenance in the immediate post-war period of large aerial police forces, in the Pacific as elsewhere, as the most likely answer to international anarchy and brigandage.

Thirdly, many of these as yet 'uncivilized' localities, where almost everything that is pleasant to the sight and good for food can be raised, are capable of being commercially exploited and of contributing largely to the mineral, agricultural and timber trade of the western world. Some of them could do more. Given hygienic, well-ventilated houses, a balanced dietary, adequate medical and recreational facilities, there is little reason why parts of Northern Australia, New Guinea, Celebes and Borneo, to name only a few of the open spaces, could not become as prosperous and well populated—by Europeans as well as natives—as Java. If such amenities can be supplied to armies in war-time, it is difficult to see why they could not be supplied to settlers in time of peace.

The moral to be drawn from the new mobility is, then, clear enough. With no spot on earth more than a few hours' journey away, with no frontiers to limit human horizons this side of the stratosphere, with a daily increasing awareness of the futility of man-made barriers, whether political, military or economic, the cultivation of a global habit of thought has become the plain duty of every man. But *thinking* alone, be it never so advanced, cannot bring in the Golden Age in which

. . . A loftier race
Than e'er the world hath known, shall rise
With flame of freedom in their souls
And light of science in their eyes.

The fashioning of such a world calls, on the one hand, for the abandonment of national prejudices, racial snobbishness and cut-throat commercial rivalries, and, on the other hand, for the acceptance by all men everywhere of their responsibilities as world citizens.

Ancient Bukhara

by PROFESSOR N. B. IAKLANOV

The author is a Doctor of Architecture and director of the History Department in the Russian Academy of Arts in Leningrad, on whose instructions from 1936-40 he joined numerous scientific expeditions to the Central Asian Soviet Republics, and visited the most remote regions, travelling by car, plane and caravan

THE exact date of the foundation of Bukhara is still unknown though it is believed that the city existed before the Christian era in the form of the castle of a feudal ruler on the great caravan route from the Far East to Asia Minor. It was surrounded by a green oasis which constantly attracted nomad raiders. For this reason the local cultivators, artisans and merchants sought protection from the *Bukhar-khudat*, the governor of the oasis. A 9th-century Bukhara historian mentions the big settlements of Remitan, Vardana and Varakhsh, fortified palaces of the governors of Bukhara of which only sand-covered ruins remain today. Bukhara itself, on account of more favourable geographical and social conditions, grew into an important city which frequently acquired the dignity of a capital.

The town grew up around a centre formed by the Kuhendia or Ark—the castle of the governor. Though changed in appearance the Ark of Bukhara still exists. It consisted of a palace, religious buildings, quarters for the governor's troops and a prison.

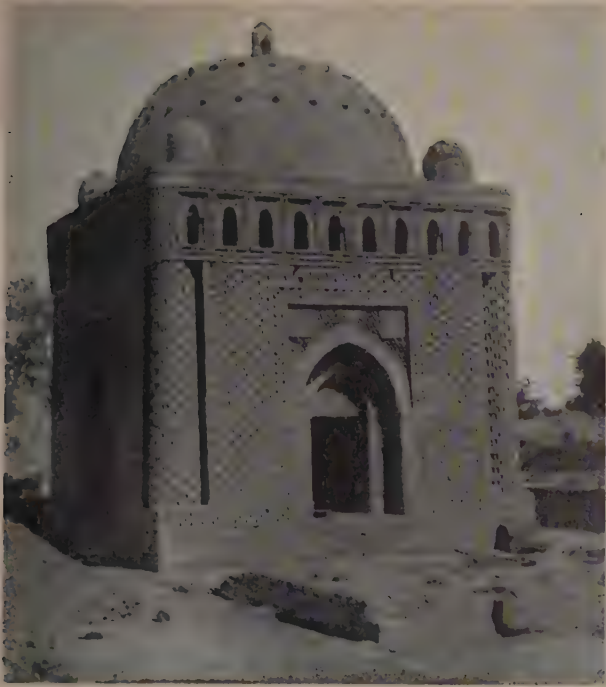
Shahristan, the second district of Bukhara, grew up around the Ark; it was inhabited by the families of the troops, the merchants who were closely connected with the governor and other feudal lords subordinate to him. Here also were administrative buildings and temples; before the Arab conquest there were

temples dedicated to the local gods, later the fire temples of the Zoroastrians and after the Moslem invasion the mosques and colleges of Islam. Both the Ark and Shahristan were surrounded by walls. Beyond the walls, the area round the gates was gradually populated by artisans and traders with a market in the centre.

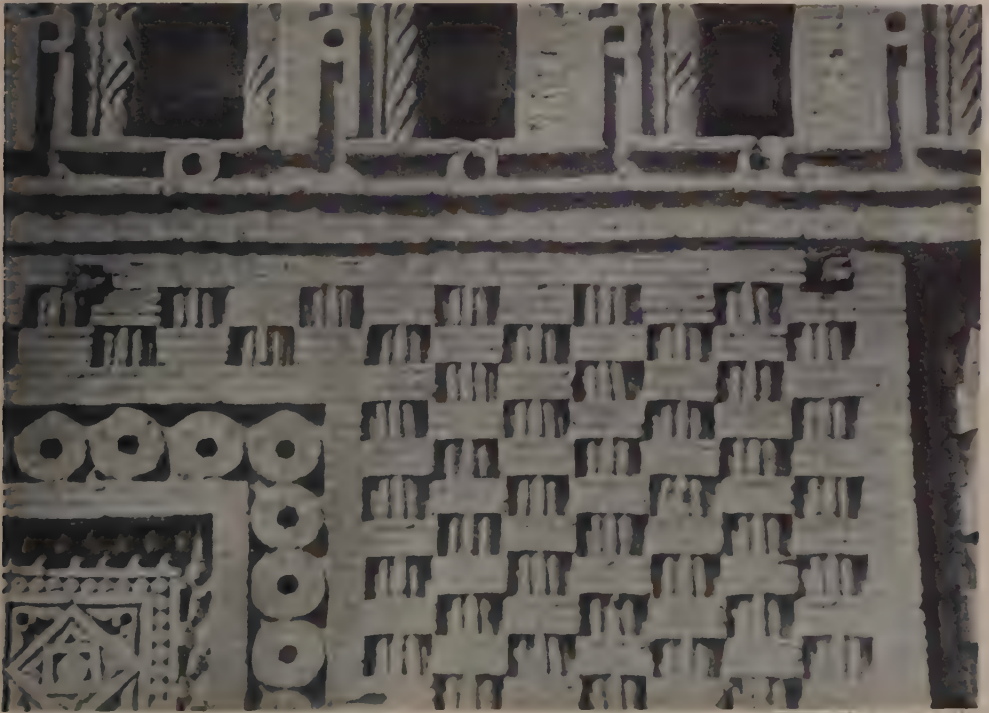
This was the nature of the city when the Arabs arrived at the end of the 7th century. They conquered and ruled over the town and oasis of Bukhara, although during the 8th and 9th centuries constant rebellions were raised against them until at last a representative of the ancient Samanid dynasty, Ismail, seized complete power over all the territory inhabited by the tribes of Central Asia, Northern Iran and Afghanistan. The tomb built in Bukhara by Ismail the Samanid, between 892 and 907, as the last resting-place of his father became a shrine (*mazar*), and is still in existence today.

The Mazar of Ismail is a small building almost cubic in form, with massive walls surmounted by a pierced gallery. The remains of an inner dome are still to be seen on the flat roof but the outer covering of the dome has not been preserved. The smaller domes at the corners were apparently added later. This building is of beautiful proportions, and for a long time scholars were puzzled as to how the young, newly-formed state immediately achieved such a high degree of perfection in architecture. The Arab buildings of that period had nothing to show that could compare with this in quality. But Soviet expeditions in the vicinity of ancient Margiana and Khoresm have, during the past few years, found a large number of buildings made from *pahs* (rammed earth) and sun-baked clay bricks; the buildings were designed by unknown architects between the 1st and 8th, or even the 10th centuries A.D. These buildings

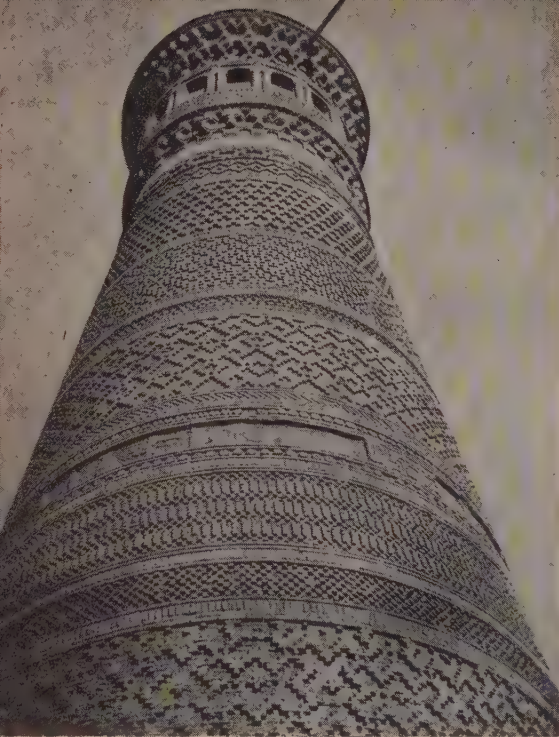




The Mazar or shrine of Ismail, a small building almost cubic in form with massive walls surmounted by a pierced gallery. The photograph below shows in detail the exterior decoration of the shrine



Photography from the Author



(Above) *The apex of Bukhara's most famous minaret, the Kalyan, built in 1127-28.*

(Below) *The gateway of the Magok-i-Attari Mosque, built in the same century, decorated with carved bricks and the ornamentation known as gerikh. (Opposite) The shrines of Saif ud-Din Bokharsi and Buyan Quli Khan*

show that the Central Asiatic builders of the 9th century had already acquired considerable building and artistic experience.

The Mazar of Ismail is an architectural link with an earlier period—the sun-baked brick period—as can be seen in the great thickness of its brick walls, the methods of building the corners and the external and internal decorations. The brick walls are covered with indentations of various forms; the columns inside are built in the fashion of wooden pillars. The *sail*, as it is called locally, a brick-work construction enabling the builder to put a round dome on a square structure, was built with extraordinary skill.

The huge caravanseraï of Rabat-i-Malik near Bukhara is also of the unbaked-brick period, though the unbaked bricks of which it is built are faced with kiln-baked bricks. These two ancient Bukhara buildings are obvious examples of local, popular architecture such as later merged into the architectural forms which the Arab and Iranian builders brought with them together with the Moslem religion.

Twelfth-century Moslem architecture is represented in Bukhara by a splendidly preserved minaret built in 1127 by Arslan Muhammed Khan of the Turanian Kara Khan dynasty which replaced the Samanids in 999. On this and contemporary buildings, such as the Namaz Gokh Mosque and the gateway of the Magok-i-Attari Mosque, built entirely of kiln-baked bricks, we get our first examples of that intricate ornamentation which was later developed to a greatly ex-



aggregated degree throughout Central Asia. The ornamentation is geometric in form and is known as *gerikh*. It is carried out entirely in brick. The huge column of the minaret which narrows gradually towards the top is completely covered with horizontal belts of *gerikh* ornament, brick-work inscriptions in relief and ribbed ribbons of brick-work. Carved bricks and brick *gerikh* also ornament the gateway of the Magok-i-Attari Mosque. The latter was half buried under the earth for a long time and has only recently been excavated and restored as far as the remaining parts of the ornamentation permit.

In the years that followed the Mongol invasion and during the reign of the Timuridae, Bukhara lost its significance as the leading city and few buildings of importance were erected. Two mazars of importance date back to this period, those of Saif ud-Din Bokharsi and Buyan Quli Khan, which together form one architectural ensemble. The latter, belonging to the 14th century, is very interesting despite its poor state of preservation. It has the usual form of the period, which had been the vogue since the 12th century. The cubic mazar has a gateway with a deep niche surrounded by a rectangular frame on one façade. From behind the gateway the tip of a dome covering the mazar can be seen. Each of the four walls contains a niche on the inside. The corners are covered with sails carrying the dome, made either as arcs of a closed vault or sections of a half dome, or, as is the case in the mazar, are a combination of small niches

known technically as stalactite decoration. The walls of the Buyan Quli Khan mazar are covered inside and out with coloured ornaments of carved terra-cotta dipped in green glaze with a background of reddish-brown glazed bricks and painted carving. Very little of this decoration has been retained, only the sails, the lower parts of the dome and fragments of the external ornamentation. The upper part of the dome collapsed and was restored in 1926, but, of course, without the decorative work.

The only building in Bukhara from Timur's time is a rebuilt 12th-century mazar in the Chishma Ayub (Job) cemetery. The mazar was built over what is alleged to be the grave of Job. The whole of the interior of the dome was covered with stalactite decoration and a second, outer dome, was built of kiln-baked brick in the form of a cone. A plate over the entrance to the tomb bears the name of Timur and the date 1383-4. Later, in the 16th century, several other domed edifices were added to the eastern side of the building, making a very picturesque group.

One building, a college, is all that remains of the time of Mirza Ulug Bek in Bukhara, the oldest existing example. It was built in the 15th century but in the 16th was repaired and faced with glazed carvings. It has a courtyard almost square in shape surrounded by a *hujr*, two-storied blocks of cells for the students of the madrasa. The doors of the *hujr* open onto a gallery which forms an arcade along two sides of the courtyard. The façade of the building contains the tra-





The Madrasa (college) of Mirza Ulug Bek, one of the oldest existing madrasas, built in the 15th and repaired in the 16th century

ditional high rectangular gateway with the built-in lancet-arched niche of the actual door. Opposite the gateway across the courtyard is a similar doorway leading into the rear premises of the madrasa. The door opens into a corridor at the end of which on one side is the winter mosque and on the other an auditorium and meeting hall. Two doors lead from this corridor into the courtyard. The general outline of this college differs from Timur's in that it is more stately and taller in proportion to its bulk. It was built by an Iranian, Ismail ibn Tahir Isfahani. On the portals Ulug Bek ordered his famous inscription to be made in majolica, "The striving after knowledge is the duty of every Moslem man and woman", an inscription which clearly illustrates the views of this medieval humanist.

After the fall of the Timurid empire its territories were conquered by the Uzbek

horsemen and Bukhara again became a capital city, this time of the Central Asiatic empire of the Sheibanids. In the 16th century the outer part of the city grew in area and new walls were built, parts of which, with their eleven gates, still stand today. In addition to the walls the famous covered bazaars of Bukhara with gigantic cupolas (*toki*) at the cross-roads were built. Of the five original cupolas three are still in excellent condition: the Toki Sarrafon (the money-changers' cupola), the Toki Tilpak Furushon (the hatters' cupola) and the Toki Zargaron (the goldsmiths' cupola). The covered bazaars have since been done away with for reasons of hygiene.

During the reign of the Sheibanid dynasty a number of huge mosques, and other important, buildings were erected. Although new methods of construction were employed which made buildings more stable during



The 16th-century Toki Zargaron (goldsmiths' cupola) which stands in the Bazaar of the Goldsmiths in ancient Bukhara

earthquakes, copies of those designed in the 15th century in Samarkand, in general the building technique was inferior to that of previous centuries. The quality of the bricks and the glazing was worse and the mosaics had neither their former brilliance of colour nor their durability. The place of the mosaics is frequently taken by murals, also from Samarkand, in which there is a large amount of gilt.

These huge murals on walls and simple arches have been well preserved in the Madrasa Mir Arab (16th century), the Madrasa Abdul Aziz (17th century), the local Baland Mosque and the Hoja Zain ud-Din Monastery (16th century). Despite the fact that the gilt has worn off, these gigantic works of art still impress the visitor but tend to shock him with their lavish ornamentation and their excessive intricacy and luxury.

In this same period the squares of Bukhara

were enriched by the addition of a number of fine mosques, and reservoirs surrounded by trees rare in the city—poplars, plane trees and grape vines on trellises. These buildings formed the architectural swansong of dying feudalism. In the 18th and 19th centuries, although new buildings were erected in Bukhara they were weak in design and frequently nothing but poor imitations. The palace of the Emir of Bukhara, built at the end of the 19th century, is a chaos of vulgar luxury, a laboured and unsuccessful effort to reproduce the former beauty of the palace of Timur.

It is only in recent times that a few of the still living *usta* (old master craftsmen) have begun to restore the arts of embroidery, weaving and glazing. The brilliant decorations from glazed brick are being carefully and thoroughly restored and decrepit buildings are being repaired.



Forgotten Lands of the Szechwan Border

by DR LIU EN-LAN

This account of a region and people not often visited by anyone from the outside world was written as the result of a tour of investigation recently made by the author, Professor of Geography at Ginling College, Nanking, and holder of University degrees in three continents. She has written various works in her own country on geographical and allied scientific subjects

TUCKED away in the mountains of north-west Szechwan over 200 miles north-west of Chengtu is a district known as Li-fan Sze-tu. *Sze* means four. *Tu* means land. *Sze-tu* means the lands of the four vassal rulers or lords of the manor. The four are the Sou-mou Tu-sze, Djo-ke-gi Tu-sze, Sung-gon Tu-sze and the Tong-ba Tu-sze. They occupy two-thirds of the Li-fan country—that is, about half the area of Wales. The total population of the Sze-tu district is about 40,000.

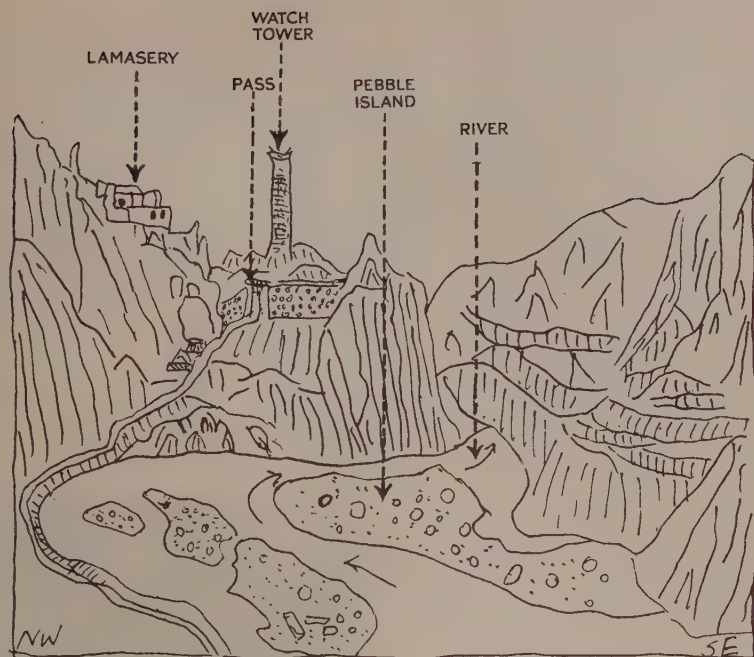
For the most part it is rugged country; mountains and valleys occupy the southern part, and a rolling plateau with low hills stretches out, seemingly to infinity, in the north. Over fifty per cent of the population is concentrated in the narrow gorge-like valleys of the south where the average altitude at the valley bottom is about eight thousand feet. The vast expanse of rolling grasslands in the north is only sparsely populated. Distribution of settlements seems to be deter-

mined by four factors: topography, climate, soil and water supply.

The lower valleys in the south are within the upper limit of the forest zone, but farther north the district is mostly above the limit, and the average height of the plateau is above 10,000 feet. Therefore even the summer temperatures are low. It is usual to see the ground white with frost in the early mornings even at the height of summer. This has greatly limited the growth of vegetation. Furthermore, the low summer temperature favours high humidity and prevents rapid evaporation. Therefore the plateau is always wet and swampy. Streams are small but numerous and run all over the place. Travelling on foot is rendered difficult, and travelling on horseback is the rule.

Grass is the foundation of the economic structure of the local community on the plateau. The supporting capacity per unit of grassland is low, consequently the population is sparse and nomadic.

Two drawings by the author: (right) each valley is considered to be one social unit and there is a lamasery as the centre of its community life; (below) settlements are scattered on the various terraces along the river wherever the land is comparatively flat and there is enough soil for cultivation. The settlements are marked in this sketch by the letter A



In the southern part of the district, the economic structure of the valley-dwelling people is based partly on agriculture and partly on the pasturing of animals. Since the river valleys are the arteries of transport and

communication, settlements are scattered on the terraces along the river wherever the land is comparatively flat and there is enough soil for cultivation. There are few large settlements and most of the houses are scattered





All photographs by the A. I.

Stanford, London





(Opposite) Scattered houses and a large settlement in the Li-fan Szetu district. (Left: top) A temple and (middle) a ruined lamasery; (bottom) two important women of the Black River region. Their clothes date in style back to the 7th-century Tang Dynasty. (Above) Priests chanting inside a temple under a banner portraying Chiang Kai-Shek. (Below) A young lama priest



around on small 'flats' where both water and soil are available. Each valley is considered a social unit and a lamasery is the centre of community life. People living in different valleys are separated by intervening mountains and have little to do with each other. Thus each community has developed a set of traditions and customs peculiar to its own environment.

In the protected Sou-mou valley in the south, at a height around 8000 feet, a variety of summer crops are grown, such as barley, peas, Lima beans, potatoes, some corn and some vegetables. But because there is only one crop a year and the people must keep part for winter use, they have got into the habit of preserving their vegetables. They pickle their turnips even when they might eat them fresh. They dry their beans and grind them with barley into a mixed flour called *tsan-ba* when they might eat them green. As a result their diet is always *tsan-ba*, tea, some milk and preserved vegetables or pepper. In the grasslands where no vegetables are grown the diet of the people is *tsan-ba*, some milk, butter with a peculiar strong smell and meat.

Thus the people eat the same thing day in day out, year in and year out. Nearly all food is preserved, the cooking process is reduced to the boiling of a kettle for tea. They do not seem to make eating a pleasure, but they do take great pleasure in drinking wine; they crave for it. For clothing they use either wool or fur, and build their houses with stones and wood. They are self-sufficient in many ways, yet they are poverty-stricken. Most of them labour from childhood to old age for a livelihood, yet die before they have tasted what real living is like.

The people of Sze-tu are of Tibetan descent. Their ancestors migrated to the valleys during the time of the Tang dynasty, A.D. 600. In the course of the Yuan dynasty, about 1100, the valleys were divided topographically into political units; each unit of land was given to a Tibetan general as his personal property and he was given the title of Tu-Sze. In return he was not only responsible for defending the boundaries of his territory, but he was also liable to be called on to fight rebels in neighbouring country. By the beginning of the Tsing dynasty, in the 17th century, the Tu-szes on the Szechwan border began to fight with each other, especially in the Black and Min river district. The four present Tu-szes were inaugurated at the time of the Emperor Chien Lung in the 18th century as a reward for their service in

helping his royal army to conquer warring chieftains.

The Tu-sze system of government was invented by the Yuan rulers, first, to weaken the Fan people by dividing them into smaller independent units, then to win their individual loyalty by giving them great privileges and rich gifts. Both the land and the people became the private property of the Tu-sze. His subjects got their allotments of land from him. In return they not only paid taxes but also had to take turns to work in his castle as slaves, eating their own food, without pay, sending messages for him, transporting his goods for him and fighting for him when necessary with their own ammunition.

But fearing that the Tu-sze might in time get to be too powerful, the Yuan rulers took advantage of the Lama faith and superstitions to prevent the people from thinking for themselves. In the Tu-sze system each Tu-sze must have a lama as his counsellor whose advice or counsels he has no alternative but to obey, because they are regarded as orders from the deity, and disobedience would mean disaster. The title and power of the Tu-sze is hereditary but the institution of the lama is by reincarnation. This again prevents lama leaders from becoming too powerful. When there are so many incarnates as to cause disputes the question is settled by drawing lots.

One can see that the Tu-sze system is designed to ensure political and geographical isolation for the Fan people. This naturally hinders development and delays progress. From the beginning of the Republic the Tu-sze system was officially abolished. But when the roots of a system extend for a thousand years it cannot be uprooted overnight. Therefore at present though the name of Tu-sze is officially abolished in fact it remains. Changes are, however, diminishing the power of the lamaseries and increasing the desire of the people for education and an improvement in their economic position.

The most noticeable feature in the district, at present, is dilapidation, shown in the great number of ruined homes and deserted terraces. This is mainly due to increasing poverty and the rapid decrease in population. The main cause of the decrease is the high death- and low birth-rate. In the Black River area of the Sou-mou Tu-sze district the annual death-rate of babies is over fifty per cent. The low birth-rate is due, first, to the fact that living conditions are too difficult and women work too hard; secondly, to malnutrition; and thirdly, to the system of intermarriage among close blood-relations.

Excessive consumption of wine and the craving for it is, I have been told, mainly the result of malnutrition. Consumption of too much preserved food, also of wine, and the scarcity of fresh food, weakens the power of reproduction. From proper nourishment comes the power to resist disease and to produce healthy offspring.

Intermarriage is universal but worst among the people of higher social status. The Sze-tu people think a lot of social rank. No matter how degenerate or how stupid a person is, provided he or she is of the so-called royal blood, they are considered to be of great importance. No matter how good or how capable, if he or she is not of the so-called royal blood, they are not thought much of by the community. Marriages in the Tu-sze and Head Men's families only take place between people of similar social rank and such families are few. Therefore very near relations marry regardless of age and blood. As a result, most families are dying out. By the end of the Tsing dynasty three of the four Tu-szes had died without heirs. This was the main source of tribal wars, because each Head Man tried to get into the place of the Tu-sze.

The last of the Sou-mou Tu-sze died in 1913 without heir. His mother ruled until 1915, when she also died. Then the five Head Men in the Black River region began to quarrel among themselves. First one Head Man was burnt to death with his whole family and slaves, then the four Head Men that were left fought on. The provincial government tried to interfere but without success. In 1927 the war spread to Lai-su-go because each called on his relatives in Lai-su-go to help. Another Head Man was burnt to death with his whole family, but one old servant named Hei-er-gia escaped. He went to Wan-tse Tu-sze of Wenchwan for help. Wan-tse Tu-sze took Hei-er-gia to Chengtu and asked for help from General Teng Si-hou. Thus started the expedition of the 24th army into the Lai-su valley. The Head Men of the Lai-su Valley all disappeared, either running away or being killed, and the Valley was thus brought under the direct control of the Li-fan government. These wars in the Black River area finally consolidated under two opposing forces: Su Yung-ho and Kong Kao Yang-ping, near relatives, each married to the sister of the other. In 1935 before these troubles came to an end, the wars of Sung-gon broke out.

It happened thus. The last of the Sung-gon Tu-sze had no son but two daughters. The elder sister married the Tong-ba Tu-sze,

the younger sister was not married and acted in their father's place as Tu-sze.

In 1914, when this woman Tu-sze was already fifty years of age, she adopted her grand-nephew: her sister's daughter's son. He again died without children. She then adopted her great-grand-nephew: her sister's daughter's grandson. The boy was killed in 1934 and the old lady was starved to death during the transit of the communist troops in 1935. The fight for the position of Tu-sze thus began and is still going on at this very moment.

In the case of Djo ke-gi, the last Tu-sze also died before the days of the Republic without heir. But the counsellor lama was a wise man. On his death-bed he said that the next Tu-sze must come from Tu-yu Shan of Wenchwan. So the Head Men obeyed his order and went to Tu-yu Shan and welcomed Suo Tu-sze to Djo ke-gi, which was duly ratified by the boy Emperor Hsuan-tung from Peking. Suo Tu-sze went to Djo ke-gi at the age of twelve in 1913 and he is still the Tu-sze today.

The fourth and the smallest of the four Tu-sze is Tong-ba which has been ruled for many years by the daughter of the late Tu-sze. She is now old and feeble and can no longer manage public affairs. She is not married, but has a son who is not accepted by the people—not on moral grounds, but because his father is not of royal blood. So at any moment when the old lady dies, if the government does not interfere in time, there will be trouble for Tong-ba.

Thus the low birth-rate has resulted in many families dying out without heirs, and this has caused wars which have still further decreased population.

The remains of ruined houses, the many deserted cultivable lands and the increasing poverty of the people, all show that the district was once more prosperous than it is today. It is obvious that the land is capable of providing the people with a better living than they get now if the natural resources were rightly developed and used.

At present, forest trees and lush grass are allowed to grow and die without the help of man. Valuable timber decays, while trees near settlements are felled regardless of size and age, or burnt in forest fires to make room for cultivation. There are forests but no forest industry in the Sze-tu district.

In the grasslands both wool and butter are plentiful, but they are not used as raw materials for industry, and are of little economic use because it is difficult to transport them to the outside world. There are plenty of wild animals to prey upon the herds.

But they are not shot in great numbers; though hides, skins and furs are of great economic value. Even cow hides and sheepskins are not used to economic advantage. The higher mountains are the natural home of medical herbs but they are not cultivated and little use is made of them, because there is no market and no demand for development. Streams with swift currents are numerous, but water-power is not used, except for a few grinding mills, because there is no industry and no demand for water power.

* * *

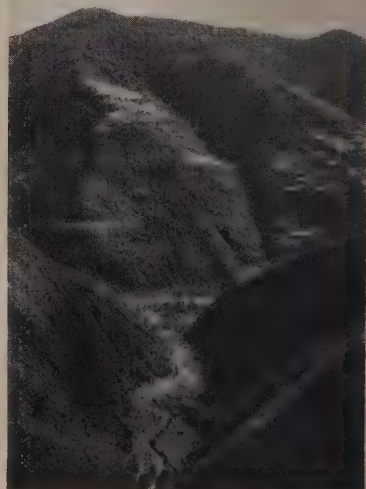
The easiest way to get to this secluded world is to make Kwanhsien the starting point. From Kwanhsien, the site of the famous Szechwan irrigation works, one may follow the Min River westward for about ten miles, then turn northward. From there one may enter the gorge-like valley of the Min, where one sees mountains to the left, to the right, in front and behind. There is no plain to be seen, except the narrow terraces along the water-course or on the mountain slopes, until one reaches the rolling grasslands about 200 miles north-west of Kwanhsien at an altitude of over 10,000 feet. Even the narrow terraces along the river are often interrupted by rock-falls, landslides and steep cliffs which drop vertically into swiftly flowing streams,

and the rocks have to be cut to make a narrow path, or rope bridges are slung from the cliff walls to allow passage to men. Thus, though there are no cherubims guarding the entrance to this Eden, and no flaming swords, natural obstacles are sufficient to keep the gate.

When one once gets into the mountains, one cannot but feel joyful, set free by the grandeur and the beauty of the mountains and valleys, and one's heart yearns over the innocence of these children of Eden.

Though their manners are not polished, and their words may sound rude, yet their hearts are true and kind. They are poor, yet they are generous towards strangers. In the so-called civilized world people seem to feel justified in enriching themselves by exploiting others. But there, in the mountains, people share with the needy whatever they have. In the so-called civilized world it is difficult to get into a place without an introduction. Even with an introduction, people are still looked upon with some degree of suspicion. It is almost unheard of for any of us to enter the house of someone we do not know without an introduction from mutual friends. Who would allow us to make ourselves at home in their house, to cook with their utensils and to sleep in their rooms when they do not know who we are? But in the mountains of north-

(Left) Path cut out of the rock along the course of a river. (Middle) The author crossing a river by a rope bridge. (Right) A deep valley, characteristic of the region, running through terraced mountains



west Szechwan it is a commonplace to do so and causes no surprise. There are no inns, no tea-houses. Moreover, there is no shop for people to buy necessities. Money has no use and consequently no value there. Whatever there is in the way of commodities, such as potatoes in some places, beans in others and meat in others again, must be exchanged on the barter system. No one talks about price. Travelling in that region, if a man is thirsty he may go into a house and ask for tea; usually he will be asked to go in to boil his own tea, while the members of the family carry on with their own work, ignoring the presence of a stranger. Sometimes, when they are at leisure, they will boil it for their guest. Of course, most of them are curious about strangers like myself, because we are dressed differently and speak differently from them. They are curious because of what we are, and therefore crowd round and watch and inquire, but not because of what we are doing. After being satisfied with tea, one presents the hostess with a few needles or small bundles of thread, estimated on the basis of the market value of fuel in the outside world. Both hostess and guest thank each other and the guest takes his leave.

Quite often on entering a small settlement one finds nobody at home: everyone has gone out working in the surrounding mountains. Some are looking after the cattle; some are gathering fuel; others are digging up medical herbs or working in the fields; some have gone far to do transport work for others, while over half of the male population are turning their prayer-wheels or chanting their prayers in the lamaseries. As the doors of their homes are thrown wide open, one simply goes in and blows the dying fire among the ashes with one's mouth to start it burning again and boils one's tea or cooks one's meal. If the hostess returns home before one finishes, she simply fetches some fuel for her self-invited guest. If the hostess does not come back, the self-invited guest may finish his tea and leave a little present behind—or even go without doing so.

Although doors are open wide, there seems to be no attempt at stealing. It might be explained by the fact that the people are so poor that there is nothing worth stealing, but it is really due to their standard of conduct: they consider stealing a shameful act. If there is a case of theft, the offender is usually ostracized or even killed by his own community.

The duties of the 'master' of the home are mainly laid on the shoulders of the housewife.

Women not only have to start the day with house-work, besides milking the cow, but also have to till the land and gather in the harvest, and sometimes they have to go long distances to carry tea or salt to earn a little more money for the family. Usually after a day's work in the field is ended, house-work begins again. Naturally, if the men are busily occupying themselves with the world-to-come by praying and chanting, the women must support the men in the affairs of this world. But accompanying the heavy responsibilities of women are privileges and power.

I have stayed in a number of homes among the Ch'iang, the Gia-rung and the Fan tribes in these mountains. I discovered that it is no use to ask the men anything because every one of them would have to turn to his wife for a decision. Their heads seem to be empty of thoughts. It is more satisfactory to deal with the women in the house. They are keen, alert and have a mind of their own.

It is a common custom for a man to be married into the home of his wife. In some cases he is allowed to keep his own name and in others is asked to adopt the family name of his wife. In both cases the children are named after their mothers' families. It also seems that the common preference of the people is to marry off their sons and keep their daughters at home. At present there are more women than men rulers among the mountain peoples and the people appear to like women as leaders better than men.

The women, with all their burdens, seem to enjoy it. And the men seem to resign with content the dominant air common to their sex. Women, in these mountains, are facing the hard facts of life, men are living in dreams for the future. Both seem to have found their right place in this society and are carrying on with laughter and song.

They all love singing and dancing. They sing so heartily that most of the time it sounds like shouting; but it comes from the depth of their hearts, and is expressed with real feeling. While the people work in the fields the Valley rings with their singing. Usually one person sings alone first, then responses come from the mountain slopes all around. One cannot see anybody owing to the distance and shrubs and trees; but one hears the singing and then the response.

We tried to learn to sing their mountain and love songs, but found it very difficult, because they sing of what they see and what they feel. Not only are the words difficult but every time they sing they change the tune and the words. These come naturally to the





(Opposite)
 These women are
 leading figures
 in the Tsa-K
 River region.
 Their dress is mu
 the same as wom
 wore in the 17
 century during t
 Tsing Dynasty.
 (Left) The m
 stand about a
 dream but t
 women's life is
 work. (Below)
 Husband and
 wife: he has m
 ried into her ho
 and family





(Above) A Tu-Sze or local chieftain wearing his 'chain of office' round his neck. He is a member of the local council of Elders. (Left) Marketing is by means of barter since money has no value



(Above and extreme right)
Threshing with old-fashioned flails on the flat roof of a house. (Right) Women doing their washing in a stream





Dancing is a speciality of the Lai-fan Szetu people. They dance when receiving guests and again on parting. They dance at wedding feasts and at all kinds of festivals: in fact they dance whenever they feel like it. This man is dancing by himself on the roof of his house

mountain people, who cannot understand why we cannot sing them when we have heard them once. They refuse absolutely to teach you the same song twice but jump from one tune to another. Even when they go back to the same song again later, the words are different. To them it is all very natural and they certainly have no idea about teaching methods.

Dancing is another of their specialities, another expression of their emotions. Besides dancing for sociability, they dance for joy. They dance when receiving guests and again at parting. They dance at the wedding party and at all kinds of festivals. They dance whenever they feel like doing so, provided they can find the time.

When we stayed with our horseman at his home in the Lai-su Valley, his mother showed her hospitality by calling her family and friends together and dancing in her kitchen. Men and women, old and young, joined hand in hand and danced around the fireplace in the centre of the room. Fire and wine are

the sisters of dancing so they must dance round a fire. When the dance is out of doors there is always a huge bonfire in the centre. All dances must be accompanied by singing; and singing and dances are always interrupted by wine drinking. Sometimes the wine is passed down the line in a jar. Sometimes the dancers simply drop out of line and suck wine out of one of the huge gongs which are put between the dancers and the fire. The wine is home-made from barley. Satisfied with drinking, the dancer would slip back to the line and continue to dance far into the night. The more the people dance the more they drink and the more energetic and alive they seem to be.

When we got to Ma-tong and Sou-mou in July 1943 we found nearly all the settlements deserted. The district leader informed us that it was a custom in the region, just before the summer harvest when they are free to enjoy themselves, for the whole community to turn out onto some mountain terrace, just as people in the lowlands go to a fair, and

dance from day to night until they are thoroughly satisfied. Sometimes they dance for three days in succession, if not satisfied then they would continue for four days or even more.

Women in the mountains have their full share of social freedom. They are free in choosing their life partners and are not secluded. Both men and women seem to be as unconscious of sex as Adam and Eve were before eating the forbidden fruit. Their behaviour, sometimes, may appear shocking to the people from the outside world, but I believe their hearts have entertained no evil. They are simply innocent.

They have their own code of ethics. In some respects we may think their standards low, yet in others they are decidedly higher than ours. They have a high standard of cooperation and consideration for others. Let me mention one example to illustrate this point. The people in the valleys, during the summer season while crops are growing and must not be grazed, have to send their cattle to graze in the higher mountains. Since it is too great a drain upon man-power for every family to look after its own herds, grazing cooperatives have been formed. When summer comes, all the cattle from the valleys will be driven to the higher mountains to graze in a common grazing-ground under the care and management of one man. From May to September is one season. The owner of the animals pays a fee to the caretaker of an agreed amount of corn or wheat for the care of his animals for the season; and there has never been trouble. Those people living in tents in the grasslands, too, have organized the distribution of their grazing-grounds. When winter comes they migrate into the valleys in an orderly fashion to their own assigned quarters, quietly and peacefully without disputes. People whose business is to dig medical herbs or hunt on the high mountains have to live in caves which are the common property of all. One might sleep in one cave for a night and the next sleep in another; and no one stays in the same cave for any length of time. But when one leaves a cave it is the custom to clean it and store plenty of dry fuel inside so that later comers find the place ready for rest, with enough fuel for cooking even when the weather is foul outside.

These children of Eden are not without shortcomings. They do not value human life. They kill without a wink of the eyelid when they are sufficiently irritated. On the road from Sou-mou to Djo-ke-gi we noticed several mutilated remains of human bodies under the cliffs at different places. To our horrified inquiries as to what had happened, our horseman simply answered casually: "Oh, simply bad people being got rid of." In quarrels of some magnitude people would murder their opponent or burn his family to death. Evidently it is not looked upon as serious because the law of the community does not inflict heavy punishment on those who kill. A murderer could always get out of his troubles by paying a ransom of some kind which is called "life price". The amount the offender pays depends upon the estimated value of the unfortunate victim.

Although they look upon stealing as a shameful act in their own community, they do, at times, plunder the herds of neighbouring clans, but at the same time they are very kind to animals.

The Lama faith seems to have a tight grip upon the minds of these people. Superstitions have dulled the vitality of their minds, especially those of men. The majority of the inhabitants seem to have no ambition of any kind and are easily satisfied; so the resources of the region are not developed and the people are living on the verge of starvation. The women are more sceptical and eager to enter into new enterprises. Some of them organize pilgrimages or shopping expeditions to the various temples in Kwanhsien and Chengtu or to sell the lovely belts they have woven and buy thread, needles and other necessities. Some of them have married men from outside who came in to trade. In some valleys venereal diseases have thus been spread and worked havoc on the decreasing population. Such bitter experiences have filled them with suspicion, and in some places their doors are no longer open to strangers and their hearts are filled with distrust because they have been deceived or ill-treated. As modern means of communication and transport break down the barriers of seclusion and isolation, we should take care that the lives of people who have been living in such isolation are made brighter and richer by contact with the culture of the outside world.



The Castle of Sermoneta

by KATERINA WILCZYNSKI

Katerina Wilczynski is one of the foreign artists to whom Britain has had the good fortune to give refuge during the war. Some of her work has been shown at the National Gallery in the War Artists Exhibition, she has made records of many of London's damaged buildings during the blitz and has completed an extensive series of paintings and drawings of Oxford and its notabilities. She won the Prix de Rome in 1930, and lived in the Italian capital until the outbreak of war in 1939

IT was an early summer day in 1934 when I went for the first time with some friends from Rome to see the Castle of Sermoneta. We started early in the morning in a car, drove along the Via Appia, passed Albano and Genzano, had a rest at Velletri and Cisterna to buy some provisions, and went straight on to Ninfa. Ninfa, which lies some forty miles south of Rome on the Naples road, is the summer residence of the Caetanis family, to whom Sermoneta, from which they derive their ducal title, belongs.

As Prince Gelasio, then Duke of Sermoneta, whom we knew in Rome was at Ninfa, we had the opportunity of being shown round it. In the 12th century Ninfa was a flourishing town with about 10,000 inhabitants. But owing to an epidemic of malaria the people had to leave it, and with the passing of the centuries the deserted town sank into the

marshes. One can still distinguish its streets, towers, roofs and chimneys; and half-sunken houses stick out from the earth, all overgrown with ivy. The vegetation is incredibly rich; wild roses, strawberry bushes, vines—a wilderness, enchanting and sad at the same time in its quietness, only interrupted by the noise of a little stream.

From Ninfa to Sermoneta is only a short distance. We passed the peasants' new houses and reclaimed marshland to which Prince Gelasio had devoted so much attention for the past few years. Driving through the plain one sees emerging in the distance 'Rocca di Sermoneta' majestically sticking out from the Monti Lepini.

The serpentine road winds uphill to the little village of Sermoneta, or Sulmo as it was called in the time of the Roman Empire. Here the car has to stop, and through narrow,



Drawings by the Author

(Opposite) *The first view of the 'Rocca di Sermoneta'.* (Above) *Entrance to the castle from the terrace through the drawbridge: looking back from here one has a wide view of the plain below*

winding passages one climbs on foot up to the top where the Castle stands. One enters a kind of terrace overgrown with grass and trees—which gives a view over the plain down to the sea towards Mount Circeo and at the other side over Ninfa and the Appian Way to the County of Sezze.

Turning back, one faces the Castle. If the outlook over the country is overwhelming, the grandeur of the Castle architecture is still more so. Massive towers are linked with huge stone walls, and it is impossible for the eye to distinguish the number of different buildings which combine in powerful unity.

One could understand Prince Gelasio's description of the place as almost unconquerable, because three sides of the rock on which the Castle stands are so steep that it would be impossible to assault, and the small saddle which unites it to the massif of the mountain makes defence easy. Since the 10th century the Castle has been in the possession of the Caetani; but before that it was in the hands of the Borgias who strengthened the fortifications. For a long time the Castle was almost a ruin, and in the 19th century state rooms were used for grain storage. Prince Gelasio started in 1905 to restore it,

with the help of numerous documents dealing with its history and construction from the archives of the Palazzo Caetani in Rome. In fifteen years he completed a great part of the restoration, which made it possible for him or members of his family to stay there sometimes.

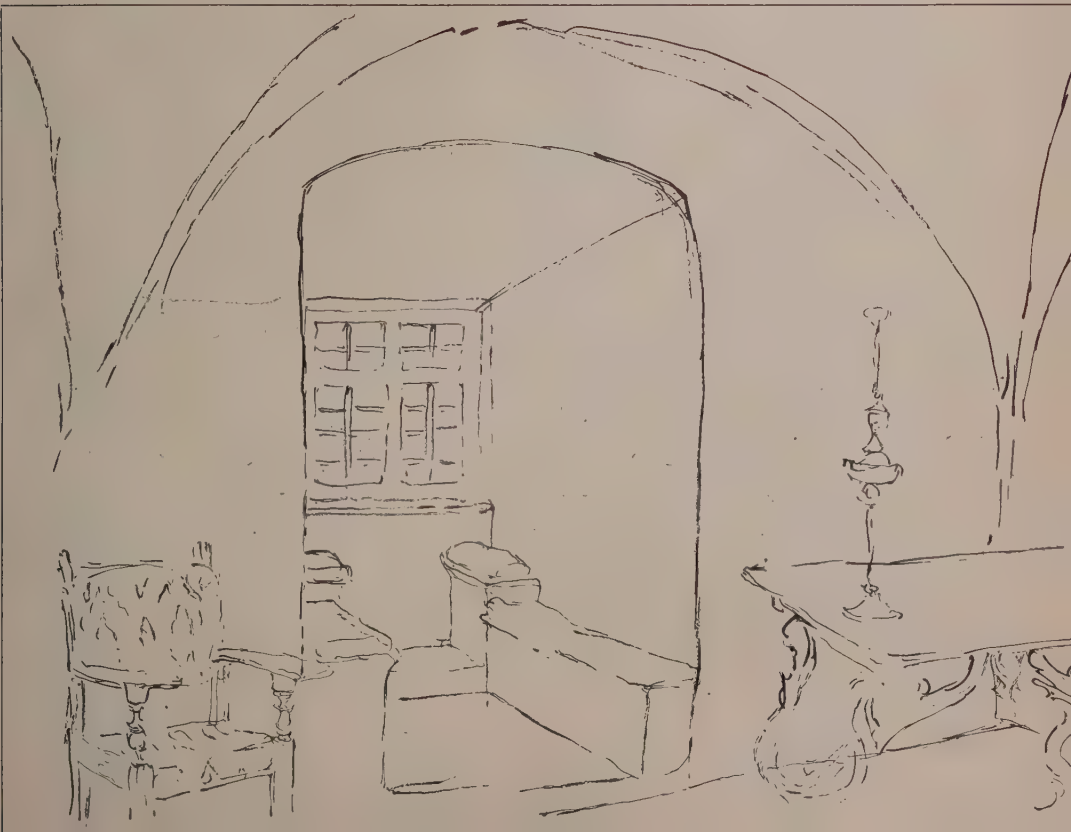
The inner court, cut off from the outer world by high walls, is very peaceful with its old well and wild flowery grass. The Custodian took us into the Castle through a succession of big halls and small rooms—upstairs and downstairs—passing enormous dungeons where prisoners were kept, up to the roof along the same small passage which the guards had to walk in old times. The atmosphere is austere, impressive and sometimes sinister. Coming out again the peace and sleepiness of the inner court seemed still more intense. We looked at the former stables, lodgings and kitchens for the soldiers round the court, and drove home late in the evening full of admiration, for the place itself and for the knowledge and discretion with which Prince Gelasio had done his work of restoration.

Long after we had come away my mind was still occupied with a vision of the castle





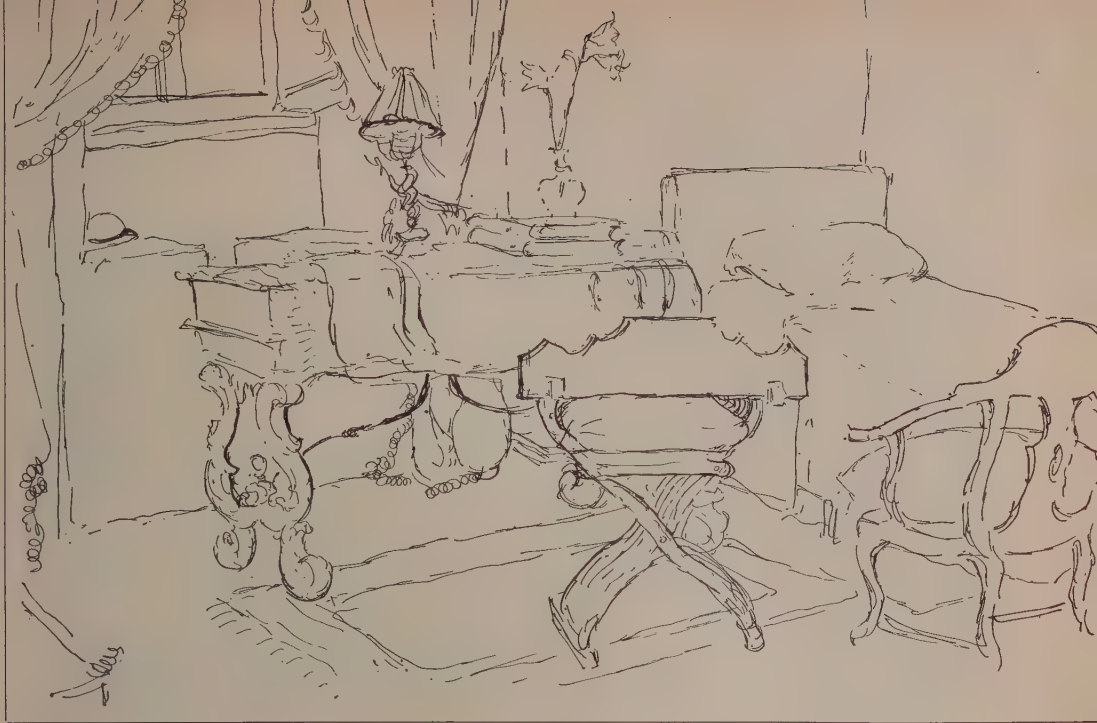
(Opposite) An example of the impressive overhead perspectives at the Castle of Sermoneta.
 (Above) The austere entrance hall; (below) a corner of a living room, showing the thick walls and small windows





Serruoneta

1/C)34



(Opposite and above) *Details of the author's bedroom in the Castle of Sermoneta, in which the distinguished simplicity of the original Renaissance furnishing has been followed*

and its bold architecture, especially the many unexpected perspectives. I could not reconstruct them from memory, and I wanted very much to be there all by myself and to make some drawings. As the Caetanis had always been so friendly to me, I asked Don Gelasio whether I could stay in the Castle for some days. He said for as long as I wished. He gave instructions to the Custodian to look after me and brought me up in his car as far as Ninfa. Many details about the work he had done and intended still to do he described to me. In return, he wanted some of my drawings to illustrate his book the *Domus Caiatani*, which is the story of his family. He had published two volumes with many drawings by himself and other artists.

I arrived at Sermoneta and the Custodian received me very respectfully—which made me feel rather shy. But how much more so did I feel when he had taken me through the innumerable austere apartments to my bedroom, and explained where light and bells were placed, because, he said, he and his family did not sleep in the Castle but in one of the houses in the inner court.

Strange and unreal was my evening meal,

with me sitting alone at a large table in a large room, in which every corner was dark and the ceiling indistinguishably high—waited on by the respectful and distant Custodian.

When I heard the door close with a bang after his departure from the Castle I was not quite sure whether I wanted to be so much all by myself.

I felt the emptiness of all the big rooms round, the prisoners' dungeons, the high staircases and the dark passages. The creaking of the old wood and the rustling in the high chimney did not make it more comfortable. Even in the daytime I never quite lost this uncanny feeling when I was indoors and I did not stay as long as I intended or make all the drawings I wanted.

But it was glorious outside; I could creep unobserved to every corner and sit and watch for hours every detail and every unexpected foreshortening,—and I took it all in, the unification of the work of nature and man, never to forget it. And never to forget the name of the restorer of the Castle, the 14th Duke of Sermoneta, who died at the end of that same year.

Bengal Jute

by SETH DRUCQUER

Our readers will share our regret that this is the last article we shall publish by Mr Seth Drucquer whose death in India last year (in an aircraft crash while on Government service) robs the Geographical Magazine of a valued contributor—notably of an article on the Bengal famine in which he displayed his geographical knowledge of the Province he was closely connected with for many years and his ability to write thoughtfully and with restraint of its political problems

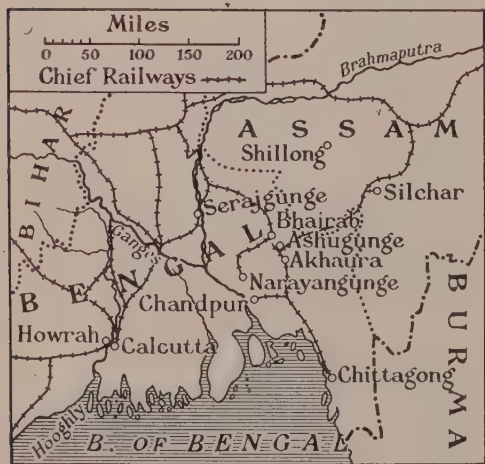
ABOUT ninety-nine per cent of the world's jute is grown in India, and of the jute grown in India, eighty per cent is cultivated in Bengal. Jute cultivation has been tried in other countries, but without much success for climatic reasons—West Africa, Egypt, Turkey, Java, Brazil have all experimented. The only places where the experiment has proved at all successful are Formosa, Thailand and Paraguay, but, as yet, cultivation is nothing like on the scale on which the crop is grown in Bengal. Java evolved a substitute crop known as 'Rosella', which was quite successful.

The Allies have, therefore, had an overwhelming share in the world's jute. Like all other raw materials, it played its part in the war effort, for it is essential in the manufacture of ropes, canvas and tarpaulin, and in recent years it has been combined successfully with cotton and wool, so that curtains, upholstery fabrics, carpets and even dress materials can now be manufactured from it.

In an earlier article in this magazine, published in March 1941, I explained how Bengal, at any rate the eastern portion of it, was a country predominantly of water and

large river-systems and that the whole economy of life, let alone social intercourse, depended on the flow of her streams. It is this copious water supply, occasioned by the confluence of India's two mightiest rivers, the Ganges and the Brahmaputra, that makes possible her two major crops—rice, that gives her her food, and jute, which provides her with the money to procure the necessities of life. In normal years, Bengal is not self-sufficient in rice, and has to import both from Assam and from Burma; much depends, therefore, on the success or otherwise of her jute crop for her purchasing power elsewhere. Jute is, in fact, the staple cash crop of the villager over the whole of Central and East Bengal, except in the areas which border on the Bay and where the lowness of the land is more suitable for the cultivation of paddy.

Despite its prevalence at the present day, the crop was not cultivated to any marked extent until early in the 19th century. The success which attended its cultivation, however, was so great and the profits to be made so large that every cultivator turned to it, with the immediate result that over-cultivation set in and prices fell. In boom years the Bengali peasant is a prosperous man, but in the years of depression, when the sale of jute became dependent on the condition of world markets, he faced ruin and starvation, as he had no other resources to fall back on. Of late years, therefore, the Government has resorted to a policy of jute restriction, voluntary at first and then, when this proved unworkable, compulsory. Nowadays the villager is only permitted to cultivate a certain percentage of his land with jute, the exact plots to be sown being determined by a committee of elders from his own village, who issue licences for the purpose. The scheme has worked fairly well, despite attempts at evasion, and the price of jute has certainly risen a good deal higher than it was a few years back. Also, the cessation of rice supplies from Burma has stressed the advisability of sowing a large proportion of land



Stanford, London



Photographs by the Author



(Top) A characteristic East Bengal village on the banks of one of the wider rivers. It is seen such as these who cultivate the paddy. (Bottom) The end of the cold weather sees the land being ploughed in readiness for the next season's crop



The jute crop is so healthy that it nearly obscures the view of village huts in the background: water from the river laps the roots of the plants, which can grow as high as six or eight feet

with food crops rather than with jute.

Jute is a wet-season crop, which means that it is sown between February and May, according to the weather and nature of the land, and harvested from the middle of June until September. The rainy season in Bengal begins in June and continues steadily for the next four months, so that the jute plant comes to maturity with the full blast of the monsoon. The whole of the land of East Bengal is low-lying owing to the geological structure and the deltaic formation of the rivers; high land is only a relative term, since nowhere does it rise to three figures in feet, but it is on the relatively higher land that jute is sown. A damp heat, such as characterizes the Bengal rains, is ideal for its growth, but excessive rainfall retards the plant's development. The land is ploughed towards the end of the cold weather, while it is still dry and hard, the seeds sown in the height of the hot season, weeding and harrowing begun with the commencement of the rains and the crop itself harvested at the height of the monsoon.

The harvesting itself is a complicated

process. The root of the crop may be under water when the day arrives, but it has to be cut well down at its base. In certain areas a special variety of deep-water jute is grown, with its roots several feet under water. Here the process of harvesting involves diving down with a sharp knife and is a somewhat hazardous process, as the plants grow close together and it is not always easy to disentangle oneself and rise again for air.

The stems, when cut, are next tied together in bundles. If the land is reasonably high, they are left to shed their leaves there, but if the land is low they are taken straight away in small village boats to higher land. The next stage is steeping the stems, which is carried out in any shallow water nearby, slow-flowing or stagnant—it is no uncommon sight to see canals and tanks, which abound in every village, full up with steeped jute from the middle of August onwards, the bundles fully submerged and often weighted down with other vegetation such as water hyacinth. The jute fibre itself is situated in the outer layer of the stem, between the wood



By mid-August, the jute fields are half-submerged in water, and 'dinghi' boats, such as these, are the only means of approaching them

on the inside and the cortex on the outside, and is surrounded by soft tissues. The purpose of steeping is to soften these tissues so that the fibre itself can be readily separated. This process of separation begins as soon as the steeping has been completed, and consists mainly of jerking the stems to and fro in the water, the fibre being thus loosened and twisted round the fingers of the separator's hand. Unfortunately the smell of the plant at this stage is so overpowering as to be almost unbearable.

After separation, the next stage is drying. The fibre is hung loosely over bamboo frames or fences and it is possible, towards the end of the monsoon, to gauge a villager's wealth by the number of strands of jute hanging out to dry in his courtyard. The drying takes two or three days and then the jute is tied up in bales or bundles, ready for the next stage of marketing. Meanwhile the uncovered jute sticks, hard and brittle, will also have been piled together, and will be put to a multitude of uses in village life, such as the repairing of hedges, the foundation of walls for mud and

bamboo houses and as a form of cheap fuel. Unlike the fibre itself, however, the sticks are not usually transported far from their village of origin.

The fibre is now ready for marketing. But it is not the simple business one might suppose to transport the jute from cultivator to mill with the former receiving the full value of the crop he has harvested. The fibre must, on the way, pass through the hands of several intermediaries, all of them out to make as much profit as they can, so that the actual sum paid to the peasant for his labours is often but a fraction of the amount that will have been paid out by the mills. In scarcely any other trade is the middleman such an evil as where marketing of jute is concerned.

As jute is a heavy substance and roads and railways few and far between in East Bengal, almost all transport is by boat. First, the individual cultivator will take his own crop in a small open boat to the *bepari* or buyer in bulk. The *bepari's* agent will probably have been round the village beforehand to bargain with the cultivator and settle

the price. Having obtained possession of the jute, the bepari will load it on bigger boats, probably the variety known as *panchis*, unwieldy affairs propelled by hand when the wind is unfavourable, by sail when the wind can carry them. Progress is slow but sure. A *panchi* laden with jute looks very much like the conventional figure of the Ark.

The next stage is one or other of the great jute ports that are scattered up and down the rivers of East and Central Bengal—Narayan-gunge, Chandpur, Serajgunge, Bhairab, Ashu-gunge are some of the more famous of them. Here the big jute trading companies will have their agents and godowns, which are corrugated tin storing-sheds. The agents purchase the jute from the middlemen here, after

weighing the fibre to see that there is not too much watery content and grading it according to its quality—its price will vary greatly according to its size and toughness. Prices vary from day to day with the state of the market, but the local agent will be in constant telegraphic communication with his headquarters in Calcutta and will be able to calculate down to the last anna the price that should be paid. (As has been emphasized before, this is not the price that will reach the pocket of the cultivator; most of the profit has gone to the middleman, who often buys speculatively and then stores, waiting for the market to rise. He is likely to have storage facilities for this purpose which are denied to the ordinary cultivator in his humble village home.) The

The villager dries the jute fibre in his own homestead. The amount of fibre to be seen suspended in a man's house is often the measure of his prosperity



agent pays out the purchase money cash down, and at the height of the season many thousands of rupees will change hands in this fashion in the course of a single day.

Before being despatched to the brokers in Calcutta, there to be re-sold to the jute mills, the fibre is next placed in presses, to be compressed for transport and to have the damp finally squeezed out, for however carefully it may have been dried in the sun, a certain amount of damp will still linger and this will add to the weight and cost of transport. Different grades are placed in different sheds to avoid confusion and the finally compressed fibre is made up into great bales, duly strapped and stamped. They are then placed on barges known as jute flats, with

corrugated tin sides and roof, which will be lying out at anchor in the river. These barges, which are flat-bottomed, will be towed behind launches or steamers down broader and ever broader streams until they find their way to the channels leading to Calcutta and the industrial area round the city. In the case of one or two inland jute stations, such as Akhaura, the fibre is laden on goods trains instead of barges, but generally speaking the latter is the normal mode of transport.

In former days there was quite a thriving hand-loom cottage industry in Bengal for converting the jute fibre into yarns and gunny bags. This still survives in a few isolated areas, for the manufacture of goods for local

Loading jute fibre in a 'panchi' boat for transport to a jute market or collecting-station





consumption only, but in the main it has been driven out of existence by the more economic machine-driven jute mills. These are of comparatively modern growth in India. The first jute mills to be established were in Scotland, where the climate and humidity of Dundee were found to be ideally suited to the purpose. This explains the large number of Scotsmen, particularly from this region, to be found in the industry in India at the present day, for Scotsmen are clannish and jute has tended to be very much of a family affair. The first raw jute was exported in 1793, but it was not till 1833 that any real success was met with in the new processes. The first jute mill did not appear in India till 1855, when it was found that conditions in the areas bordering on the river Hooghly north and south of Calcutta were as favourable as in Dundee, and since then there has been considerable rivalry between the two, with Scotsmen controlling both. Gradually through the years, however, the Indian jute



(Left, top) *Spinning the fibre in a jute-mill;*
(bottom) *winding the spools after the jute has been spun. Women are frequently employed in this type of work. (Opposite) A 'panchi' boat, shaped like an ark, carrying jute to one of the big collecting-*
stations.



mills have won supremacy against their Dundee rivals until at the present day there are over a hundred jute mills spread out along either side of the Hooghly for a distance of twenty-five miles north and south of Calcutta. Not all of them are in Scottish hands; many of them are Indian-owned, principally by Marwari business men from the west of India. But whether they are Indian-owned or British-owned, they constitute one of India's major industries, are one of the foundations of Bengal's wealth and provide work for thousands of labourers, although a good deal of the unskilled labour is imported from outside Bengal.

There are six main stages in the process of manufacture—batching, preparing, spinning, winding, weaving and finishing—and the average mill is divided up into six departments for the purpose. In the batching stage,

the various qualities and grades of jute are blended so as to ensure uniformity of strength and colour in the different types of yarn. At this stage, also, oil and water are applied to soften the tissue and make it easily workable. (Jute in its raw state is very rough owing to the absence of any natural oil, but is converted in the mills into a smooth and silky substance.) The process of batching is carried out either by hand or by machine.

In the next stage, that of preparing, there are three processes—carding, drawing and roving. The object of these is to lengthen out the fibre into a continuous ribbon called 'sliver'. In the carding process, the raw fibre strands are split, shortened in length, combed and drawn into a loosely-knit ribbon of fibre. The fibre is passed through two sets of cards for this purpose, known as the 'breaker' and the 'finisher'. The drawing



Labourers leaving the jute mill for their midday siesta

stage merely continues this process, and, as its name implies, consists in drawing out the fibre and gradually reducing its weight to a size that can be suitably twisted into a 'rove' for spinning. In the roving stage, the

'slivers' are twisted into 'roves' which are wound on to large wooden bobbins in readiness for actual spinning. These three processes of carding, drawing and roving are, naturally, carried out on machines.

In the spinning department, yarns of varying weights and degrees of fineness are spun. The degree of twist given to the yarn is regulated according to the class of yarn required. The weight is continually checked throughout this process, to ensure uniformity.

Next comes winding, in which the yarn is wound in a manner suitable for it to be converted into cloth. This is followed by weaving, on looms such as can be seen in any North County manufacturing town in England. Finally, there comes the stage of finishing, to improve the appearance of the cloth, for when it leaves the looms it will be in a rough condition, with uneven surface and inevitable weaving faults. There are two or three processes at this stage, such as cropping, or removal of projecting fibres from the surface of the cloth to give it a smooth appearance; damping, to prepare the cloth for subsequent processes in which heat is generated; calendaring, or pressing, which flattens out the threads; lapping, in which the 'cuts' of finished hessian are folded into sizes suitable for packing; and, finally, packing and baling, the baling being done by hydraulic presses, before shipment. In the packing stage, the goods are wrapped in gunny cloth to prevent them from becoming dirty, and secured with metal bands or hoops.

The finished product is now ready for export, to be used for a multitude of purposes, according to the nature of the cloth manufactured—hessian, sacking, canvas or yarn and twine. Hessian itself is used for a whole range of objects, from meat wrappers and backing for linoleum to linings for clothing and—important in war-time—sand-bags. On this latter account, indeed, and in the manufacture of camouflage nets and strips the jute trade has had a minor boom during the war, though not so big a boom as it enjoyed during the war of 1914-18.

The use of jute for sacking carries it into the four corners of the world—to Australia for corn, to Egypt for grain, to Cuba and the Levant for sugar, and, in times of peace, to Java, to Brazil for salt nitrate, to Australia and the Cape for wool. Thus, jute is as much-travelled a commodity as any other in the modern world.

Canvas, again, covers a wide range—boat-hatch covers, sun-blinds, tarpaulins (after treatment with bitumen), and rugs and carpets, formerly manufactured only in jute mills in Europe but now undertaken in Bengal also.

All this overseas trade is of comparatively modern growth; the first serious attempt was not made until 1868, and it was not until the 'eighties that the demand became heavy. Nor is the demand likely to decrease with the years, for no really satisfactory substitute has yet been found, and research is continually being made for new uses for the raw and manufactured article. Latest attempts suggest a possibility of fine blankets made of an admixture of jute and wool.

Bengal and jute, these are two terms nearly synonymous. Bengal connotes jute and jute Bengal. Without this prolific crop, Bengal would be a poor country indeed, for it brings her cultivators the larger part of their profit. Yet it is a crop nearly as whimsical as her rivers in their ever-changing courses; for it depends on world markets for the prices it fetches, and obscure happenings in the Middle West or in Berlin or in Tokio or anywhere else in the world may upset these prices' stability. In prosperous years no crop can yield greater profits; in lean years, or when the crop fails through drought or flood, the villager is driven to destitution, the local money-lender and a feeling of regret that he has ignored advice, put all his eggs in one basket and not sown just a portion of his land with other seed to tide him over the emergency. But the Bengal cultivator, as the cultivator in any other country of the world, is conservative and improvident and only compulsory legislation by the Government can force him to do what common sense should have prompted in the first instance.

A modern jute weaving loom, the thread coming from the rear passes through the loom (which lies in front) to form the finished material

Dorien Leigh



Recollections of Woodstock and Blenheim

by ISOBEL W. HUTCHISON

THE double-decker bus into which I had packed myself for the eight-mile drive from Oxford to Woodstock was crammed with country-women returning from the queues of war-time Oxford. The driver, a girl, had brought us in a refreshingly leisured fashion along a road bordered by those flowery hedgerows which are found in perfection in southern England, and are at their best in this area, once covered with the royal hunting forests of Woodstock and Wychwood. Here and there the dangling signpost of a wayside ale-house held out hopes to the thirsty traveller, hopes probably destined—like those of most war-time shoppers—to be disappointed; here and there the handsome stone farmhouses of this lovely shire, their slated or thatched roofs garnished with velvet moss, drowsed in noontide serenity under spreading yews and cedars. In one roadside garden I caught a glimpse of England's almost lost topiary art. A fine yew had been trimmed half-way up its noble girth into

frills and ruffs like those which once preserved the long neck of Queen Elizabeth, who was much connected with the old palace of Woodstock now unhappily demolished, for she was imprisoned in its gatehouse for a year by her sister Mary Tudor, suspected of complicity in Sir Thomas Wyatt's plot. Here Elizabeth inscribed with a diamond ring upon the window these sly words:

Much suspected, of me
Nothing proved can be,
Quoth Elizabeth, Pris'ner.

"Hearing upon a time out of hir garden at Woodstocke," says Holinshed the Elizabethan chronicler, "a certaine milkemaide singing pleasantlie, she wished hirselfe to be a milke-maid as she was, saicing that hir case was better, and life more merier than was hers, in that state as she was."

I alighted in Woodstock, home of King Henry II's 'Fair Rosamund': Rosamund Clifford, whose story—although probably

Oxford Mail



legendary—is inseparable from the place. To protect his mistress from the jealousy of his wife Queen Eleanor, the King is said to have constructed for her a secret bower in the royal park, reached by an intricate labyrinth. But his precautions were in vain. One day she was surprised in the grounds by the Queen. She fled, but caught her foot in her ball of sewing-silk. By the trail of silk Eleanor discovered Rosamund's retreat, and there offered the unfortunate lady her choice of the poisoned bowl or the dagger, a scene memorably depicted in John Leech's illustration to A'Beckett's *Comic History of England*.

Today all that remains of the bower is a green mound beside Rosamund's Well, a rather dingy pool walled by an iron grille. It stands in Blenheim Park near a famous cedar which returns a sevenfold echo in favourable atmospheric conditions, being particularly responsive after dark. The tangle where Rosamund and her lover wandered is now an open glade bordering the lake which Capability Brown, the 18th-century landscape gardener, constructed by damming back the water of the little stream, the Glyme. The Glyme is a tributary of the Evenlode, which in turn is a tributary of the Thames. Brown made it his boast that the Thames would never forgive him for what he had done at Blenheim. The path by Rosamund's Well is still known as the Lovers' Walk. In the shade of the echo-tree I came

upon two American officers, each accompanied by an English girl, enjoying the brief hours off duty under the old cedar, which was reciprocating their college cry with a sevenfold Harvard yell.

* * *

Woodstock, eight miles north of Oxford, is set in the lap of the great Palace of Blenheim, built by a grateful Queen and country for John Churchill, first Duke of Marlborough, a reward for his victory in 1704 over Louis XIV, the European tyrant of that period. It is fitting that this famous palace, still the home of the Dukes of Marlborough, should be the birthplace of Britain's great Prime Minister.

Though Woodstock possesses a house once occupied by Oliver Cromwell, with rounded bay-windows watching the street like prominent eyes, as well as a prim and rather flat-chested little mansion in the angle of Blenheim Park, overhung with wistaria and roses, in which Thomas Chaucer, son of the poet, is said to have lived (and in the garden of which rumour plants the first 'Blenheim orange' apple tree), it is neither Chaucer, his son, nor the stern Lord Protector whose fame is today most commonly associated with the old town, but a very different trio. It was as "Mr and Mrs Freeman" that Queen Anne delighted to honour her girlhood's friend Sarah Jennings and her noble husband John

Oxford Mail

(Opposite)
*Floodlit view of
the north front of
the great Palace
of Blenheim.*
(Right) *The
orangery and the
formal Italian
garden—one of
the best examples
in Britain*





Harold T. White

The leaden statue of the Great Duke of Marlborough set up by his Duchess on a 130-foot pillar opposite Blenheim Palace. From the ground it looks no larger than a man, but in fact it is 25 feet high. When this photograph was taken it was under scaffolding for repairs. (Opposite, top) Woodstock church; (bottom) the Elizabethan manor-house at old Woodstock

Churchill, it was to "Her dearest Mrs Morley" that Sarah Churchill wrote those candid but impolitic letters preserved in the pigeon-holes of the Muniment Room at Blenheim Palace, where Marlborough's biographer Winston Churchill culled some of them two centuries later for his remarkable account of the Life and Times of his great ancestor.

Though 'Mr Freemah' was so much at the wars that he had to leave the supervision of the great building to Sarah, extracts from some of the letters quoted by Mr Churchill

show how much he loved Woodstock and longed, amid the turmoil of war and the bitterness of party faction, for its rest and peace,

"Pray lett mr. Travers know that I shall be glad to hear sometimes from him how the Building goes on at Woodstock; for the Gardening and Plantations I am at ease, being very sure that mr. Wise will bee dilligent." So he wrote to his wife on the eve of the battle of Ramillies, and again just after it on his 57th birthday (June 6, 1707): "It is



photographs by P. S. Spokes





Bladon Church, dedicated to St Martin, whose effigy can be seen above the porch

true what you say of Woodstock, that it is very much at my heart especially when we are in prosperity, for then my whole thoughts are of retiring with you to that place”.

But the Duke died before he could adequately fulfil this wish, leaving Sarah to carry the work to completion. Unfortunately the Duchess's blunt candour was the very antithesis of her husband's monumental patience and tact. She quarrelled with Vanbrugh, the architect, even forbidding him to visit Blenheim to supervise his workmen. Posterity can also blame Sarah Churchill for the vandalistic removal of the old royal palace of Woodstock, a ruin of historic interest situated on a mound just north of the present lake. Built by Henry I, it had been occupied by almost every British sovereign since that time. Despite Vanbrugh's protests, it was ruthlessly pulled down the year after the completion of

the new Blenheim Palace. This was finished at last in 1722, as recorded in the inscription over the main entrance:

Under the auspices of a munificent Sovereign this house was built for John Duke of Marlborough, and his Duchess Sarah, by Sir J. Vanbrugh, between the years 1705 and 1722, and this royal manor of Woodstock, together with a grant of £240,000 towards the building of Blenheim, was given by Her Majesty Queen Anne, and confirmed by Act of Parliament (3 & 4 Anne c. 4) to the said John Duke of Marlborough and to all his issue male and female lineally descending.

The whole of this grant was never fully paid. In 1712, when the Duke fell out of royal favour, building at Blenheim was stopped by the Queen's order. On Marlborough's reinstatement after the accession of George I he completed the work at his own expense,



N.B.R. photographs by P. S. Spokes

The Old Malt House at Bladon, famed for its two round chimney-stacks

spending about a fifth of the total cost of £300,000.

The result was majestic. "We have nothing to equal this," exclaimed George III to his wife and daughters, as they gazed from the royal carriage over the lovely expanse of water, park and woodland towards Vanbrugh's noble pile.

An interesting custom is maintained yearly at Windsor, and has been carefully upheld throughout the war years; a white satin banner, charged with the three fleurs-de-lys of France in gold, is sent to the Superintendent of Windsor Castle on the second day of August in each year—the anniversary of the Battle of Blenheim—as a quit-rent to the King for the whole of the ducal properties at Woodstock.

* * *

From the south front of Blenheim Palace

the square tower of Bladon Church is seen far off framed in a vista of trees. The old church of Bladon probably dated from the conquest. It is mentioned in Domesday Book as 'Blade', the land then belonging to the Bishop of Bayeux. Unfortunately no trace remains of this old church, which was pulled down in 1804. The present building is dedicated to St Martin, whose effigy, on horseback with cloak and beggar, is depicted above the porch. It is the Mother Church of Woodstock, and though of little interest to the antiquary, its churchyard is notable for it contains the graves of the Prime Minister's father and mother—the brilliant young Chancellor of the Exchequer and his beautiful American wife. Amid grey slabs and nameless mounds the Churchill grave with its simple white crosses made a patch of light and colour when I saw it on a lovely summer afternoon,



The ancient elm in the characteristically English village of Yarnton, five miles south-west of Woodstock, in which there is a fine old manor-house once the home of a branch of the Spencer family; below is a section of a window in the Spencer Chapel of the 12th-century church at Yarnton. The arms are those of Sir John Spencer, who died in 1586, and his wife

I. H. Taylor

I. W. Hutchison



for it was filled with rambler roses in full bloom.

Mr Winston Churchill's birth, the curate told me, was in the register at Woodstock. But in Bladon there were a few of the older people who had known the Prime Minister as a boy. Had I met the ladies at the Old Malt House over the way? The house with the round chimney-stacks? They used to play with him. And talking of chimneys, had I seen the famous one on the Manor House at Old Woodstock?

One of Blenheim's architectural merits, in the eyes of connoisseurs, is the cunning with which its designer, Vanbrugh, has concealed from view every chimney, those vulgar but necessary outlets for the open fires of his day. It is interesting therefore, to find two of the

oldest houses in the district renowned for these very features, and by the kind offices of the curate and the courtesy of their owners, I was able to visit both.

The legend which attaches the Black Prince to the Manor House at Old Woodstock can be dismissed. But the house in which the Prince was born may have occupied the site on which the Elizabethan manor-house now stands, for we know that the event took place in Woodstock, and that the King hired both a nurse and a 'Rocker' for his infant son. The rocker, by name Maud Plumpton, received for her task the yearly sum of ten marks.

Shortly before my visit to the Old Malt House at Bladon Mr P. S. Spokes of Oxford

I. W. Hutchison

Woodstock has been famed for glove-making since Tudor days. The gloves are now cut out at the factories and hand-sewn by workers in the surrounding villages. This picture shows a glove-maker at Stonesfield near Woodstock



had photographed it for the National Buildings Record. He describes it as "An L-shaped house of two stories and attic. The walls are of rubble and the roof covered with Stonesfield slates. The north wing was built about 1500."

Stonesfield, a small village west of Blenheim, supplied the slates for most of the old roofs in the district, but its quarries have been silent for the past forty or fifty years. Of the two round chimney-stacks on the Old Malt House (whose name, by the way, is modern) one has been restored by the present owners.

* * *

Four hundred years ago Queen Elizabeth graciously accepted a pair of Woodstock gauntlets, and Oxford University presented King James I with a specially fine pair on his visit to Woodstock.

"It's very interesting," said the Manager of one of the glove factories whom I visited on my last day in Woodstock, "when you come to think of it, how it all began,—the forests brought the deer, and the deer the skins, and the skins started the glove-making. Oxfordshire is famous for sheep too, there's Witney with its blankets, and Chipping Norton with its cloth factory."

"Where do the skins come from now?" I asked.

"Well, no dressing's done here now, of course, but before the war the hedges all down Green Lane would be hung with sheepskins. They bleach them other ways now, sulphur and formaldehyde cut out the sun-bleaching, and the leather comes in ready dressed from all over the world. Real pre-war Peccary hogskin from South America, and sheepskin (we call it 'Cape') from South Africa, and the East Indies and Egypt give us skins, besides the English supply. But come and see."

I followed him through rooms where experts with shears a foot long were clipping the skins and shaping gauntlets to be worn by bomber pilots of the United Nations.

"We make chamois linings for the bomber crews too, since silk got so hard to obtain. They have to have something soft and supple so that they can feel what they handle."

Upstairs in a long workroom women at sewing-machines were expertly stitching glove-fingers together. Quite a lot of this work is still done by hand, however. The gloves are cut out at the factories and sent out to hundreds of workers in their homes in the surrounding villages. "One of our best workers lives in a village near Wychwood. She's over seventy now and she's worked at glove-making since she was eight. She told me her old Dad of ninety-three goes to Wychwood forest every week and carries home a

limb of firewood. I felt like asking her how her Grandpa was! Glove-makers both, I shouldn't wonder. It's in the blood here."

* * *

The last hours of my visit were spent in Blenheim gardens, which, like the Palace itself, are closed to the public during war-time; but I had been privileged to obtain a pass which admitted me through an orangery (now filled with tomatoes) to the formal Italian garden, one of the best in Britain with clipped yew scrolls, statuary and fountain.

On the other side of the Palace is the water-garden arranged by the late Duke, who employed Duchesne as his architect. Here all day long sounds the constant splash of water ebbing and flowing in the great basins. And here, a further reminder of the City by the Tiber, is Bernini's original model for his famous fountain in the Piazza Navona, in which four gracefully sculptured stone figures represent the four great rivers of the continents, the Danube, the Ganges, the Nile and the River Plate. From the centre of the group springs a tall obelisk.

Looking northward from this fountain the view leads to the towering Column of Victory (130 feet high) erected by Duchess Sarah in memory of her husband. The huge leaden figure of the Duke, clad in Roman battle-dress, is a landmark for miles around, rising above the trees of the park.

But it is neither the Italian garden nor the water-garden, nor even the rock-garden at the far end of the lake, with its bridge, cascade, and miniature stairs and terraces, to which my thoughts return when I think about Blenheim. To the left of the south lawn a green turf walk leads under the trees, past a little temple commemorating George III's restoration to health, past the 'Roundabout', with its clipped box and yew hedges radiating like the spokes of a wheel from a bronze group of children. Turning aside here the wanderer comes on a charming little pond overhung with trees and covered with white and crimson water-lilies. Here all remembrance of war drops from him as he listens to the "rookety-coo-coo" of the wood-pigeon and the distant lowing of cattle. Even the planes, droning far above in the clouds, sound like murmuring bees, and quiet prevails—that quiet for which John Churchill longed when he wrote to his wife from his camp at Amougies on August 27, 1708: "We have for these last ten days had extreame hott weather, which I hope may give you good peaches at Woodstock, wher I shou'd be better pleas'd to eat even the worst that were ever tasted, than the good ones we have here, for every day of my life I grow more impatient for quiet".



On Leave in Rome

by DAVID SCOTT DANIELL

ALTHOUGH part of the object of my leave was to see the 'sights' of Rome, I wanted also to see what it was like to live in the city itself, and to forget the war for a few days.

I was to have flown down from the north, where I was stationed, but by altering my watch one hour in the change from Double British Summer Time to British Summer Time I arrived at the airfield an hour late: planes fly by Greenwich time, a point I had overlooked. So I had to 'hitch-hike', thus making my pilgrimage to Rome by a route that generations of pilgrims and mountebanks, scholars and artists had travelled through the centuries—through Grosseto and Civitavecchia. The first ride took me to Piombino, the next ten miles beyond, the next to Grosseto and then an American personnel truck, with five soldiers also bound for Rome, picked me up and by four in the afternoon I saw the walls of the Vatican, high and steep, with grass at their foot, whereon children played, old men dozed in the sun and thin sheep, tethered with string, grazed. We crossed the green waters of the Tiber and drove into the maelstrom of traffic at the Piazza Venezia. Here I left my hosts and went to my 'leave' hotel in a taxi. After dinner I went to the terrace above the Piazza del Popolo and gazed over Rome in the evening light. There were the domes, St Peter's in the distance, the Colosseum, spires

and towers. It was a fine place to stand and muse.

* * *

My first morning was spent in the Palazzo Venezia, where some one in the Division of Monuments, Fine Arts and Archives of the Allied Military Government had arranged an exhibition of paintings, mostly Renaissance masterpieces sent to Rome from other cities for safe-keeping. Apart from the pictures, I seized the chance to see the State Rooms of the Palazzo.

Originally the residence of Popes, it was given to the Venetian Republic in the 17th century. It fell into disuse and decay until it was converted into a Museum of Medieval and Renaissance Art. Finally Mussolini adopted it as his official residence. It suited his purpose, for there were imposing rooms for his 'office', where visitors could advance towards his desk across a vast marble floor. There was also the famous balcony looking onto the Piazza.

I spent the afternoon wandering around, looking at shops, studying a map of the city, and calling for tea on some civilian relatives of some Italian friends. They had apartments in the Royal Palace. Polite conversation with tea in a precious cup was pleasant and resulted in a visiting card to be presented at the Palace the next afternoon, for a tour of the State Rooms. The evening was devoted to a visit to the cinema, a rare pleasure after





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(Opposite, top) A photograph of St Peter's, Rome, taken on the day after the city was liberated—on June 4, 1944; (bottom) an Allied combatant resting and reading outside one of the fountains in St Peter's Square. (Above) The Colosseum attracts the interest of sight-seeing troops who spend their leave in Rome



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Ceremonial standard bearers at the investiture of the new, anti-Fascist mayor after the liberation of Rome last June

three months without such a luxury.

It was a superb cinema, with a sliding roof to ventilate it between performances. But as always in Italy the seats were of wood. Neither were there any of the thick carpets of our cinemas at home.

In the dusk of the evening I visited the Forum. An elderly Roman with exquisite manners told me something about the ruins in the faint light of the stars. Slowly, for the sake of my unfamiliarity with his language, he told me about that most

historic valley, pointing out the ruins of the Temple of Caesar, built by Augustus in 29 B.C. in honour of Julius Caesar, on the spot where Mark Antony made his famous oration, and the Temple of Castor and Pollux, built in memory of the victory of Lake Regillus in 498 B.C. We parted with compliments and good wishes, and, left alone, I wandered and thought, as so many have done before me, on this astonishing record of the past.

* * *



Photograph from W. F. Mansell

The marble group in the Basilica of St Peter—one of the loveliest and most sensitive of Michelangelo's sculptured works

My drive to St Peter's in a *carròzza*, picked carefully because the horse was not too old to hold his head up, gave me an impression of the new khaki Rome. Soldiers sight-seeing were everywhere. They thronged the streets and looked into shops, in pairs and in clusters, singly and with civilian girls. They sat at little tables outside the cafés and they rode in carriages and in army trucks. British and Americans predominated, but there were Poles and French, Indians and coloured Americans, Canadians, New Zealanders.

Inside St Peter's I looked, of course, at the 'stock' points of interest: the wonderful proportion of the encircling porticos, with their 288 columns, like two open arms to receive the pilgrim to St Peter's tomb; the two fountains in the middle, spraying water high into the sunshine, and the Obelisk between them—brought from Egypt in A.D. 37, standing for fifteen centuries in the Circus where chariot races and bestial 'games' were staged and early Christians were dressed in skins and thrown to wild beasts, and now, standing



where Pope Sixtus V had it moved by Fontana in 1586, exorcised and surmounted with the cross—; the five great doors to the Basilica, the Holy Door bricked up and used only once in every twenty-five years, and the bronze door in the centre, cast in 1455. I strolled about and drank in the splendour of the place and the lavish decoration. I found the brass stars on the floor marking the size of other famous cathedrals, and it was with patriotic satisfaction that I saw our own St Paul's placed second. I also found a link with home in the monument to Maria Sobieski, which claims her as wife of 'James III' and "Queen of England, France and Ireland". Opposite is the Monument to the Stuarts, 'James III', and his sons Charles Edward and 'Henry IX', Cardinal of York. I saw St Peter's great bronze statue, with the toes worn away by the kisses of the faithful, the Confession, with its steps and lamps, its relics and columns of agate, the Privileged High Altar, the works of Michelangelo and Bernini, and the lions of Canova. It was with a sense of relief that I turned tripper and climbed the steps

to the inside of the Dome, where they embarrass you as in St Paul's by whispering at you.

* * *

To obtain an audience of the Pope all an Allied soldier has to do is to join a rather shy-looking crowd outside the glorious flight of steps to the Vatican. You go up the steps, past Swiss Guards, and into the Hall of Kings, vast and gilded, with gigantic wall paintings by Vasari. Here you are given a small printed photograph of Pius XII. Then you go through a lobby to the vast chamber where the public Audience is held. The ceiling is cream and gold, and at the far end there is a platform across the end of the hall, and on it a dais, backed with red material. On the dais is a golden throne. Down the centre of the hall is a passage made of plain wooden railings. There are chairs in rows at each side of the throne; to those on the left women are taken—all women on war service—and to those on the right, Allied officers. People start coming in at



Photographs from W. F. Mansell

Two of the works of great Italian masters on the walls of the Vatican: Raphael's fresco of Attila's encounter with Pope Leo I, and Fra Angelico's portrait of St Stephen preaching

noon, and continue until the chairs are all occupied and maybe a thousand men stand at the foot of the platform and along the railings. We waited for an hour, but the room made the waiting interesting. It is over the portico of St Peter's, and the central windows open onto the balcony from which the Pope blesses the public in the Square before the Basilica.

It was hot, people chatted, and the Swiss Guards in blue and yellow uniforms, with slashed sleeves and halberds, stood about. Then there was a stir, and over the heads of the crowds along the railings we saw the Pope, in white robes, seated in his carrying chair. He touched rosaries held up to him, and also heads, and dispersed his blessings fairly, first this side, then that. The cortège was led by gentlemen-at-arms, magnificent in Court uniforms, plumed helmets, orders and swords. The Swiss Guards led and followed. The Pope passed on thus to his throne, shaking hands and chatting to officers in the front row of chairs as he went. Then he addressed the crowd, first in English, then

in French, then in Italian.

It was a simple address, amplified by loud-speakers. We were welcomed to Rome. We were far from our own homes. He blessed our parents and families and prayed for our speedy return. Then he stood up and, his beautiful hands raised, blessed us. A slight man in spectacles, with a brilliantly intelligent face and a sweet smile, surrounded by pomp and circumstance which contrasted with his plain white robes and white skull-cap.

For twenty minutes the Pope chatted to us all: soldiers—the British in shorts and open shirts, the Americans in greeny-grey varieties of hot-weather uniforms—jostled for position and formed a narrow circle in the midst of which stood this slight, delicate, amazingly informal and friendly man who occupies the most historically eminent position in the Christian world.

Some of the American soldiers had small cameras, with which they took photographs at a range of a few feet. Many had rosaries and souvenirs which they held up to be blessed. It was an extraordinary scene, oddly demo-

cratic, and remarkable for the endurance of Pope Pius, who, day after day, is thus surrounded by men for each of whom he has the same informal, easy and friendly words, always said with a disarming smile.

When the press had thinned, the Pope sat again in his chair, the procession formed up, and the bearers raised the chair and carried it down between the rails. Again the Pope touched hands and rosaries held up towards him, until at the great doors of the Hall the crowd were deftly checked by four gentlemen-at-arms who stood in the doorway, thus leaving the stairs and lobby and the Hall of Kings empty for the procession to move away.

On the way out an attendant pointed out that one of the great doors at the end of the Hall of Kings was to the Sistine Chapel, then closed for two weeks to the public. This was sad, because it was a main objective of my holiday to see the work of Michelangelo here. However, a chat with a Swiss Guard on the

A British airman accompanying a service on the great organ in St Peter's. (Opposite) The Pope addressing Allied War Correspondents, to whom he gave an Audience in the Vatican



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stairs produced the information that his brother, who had worked in a Glasgow hotel, would be pleased to take me and a couple of friends into the Vatican gardens, where as a citizen of the Vatican city he had the entrée, and to show us round the Palace. He could even, he thought, take us into the Sistine Chapel.

There were four of us to meet my Swiss Guard at ten o'clock in the morning. We went into the gardens by the gateway to the left of St Peter's, and once inside there was an atmosphere of tranquillity, as though to proclaim that this was a neutral State. Curving roads, islands of trees, banks of bushes, buildings old and new, and over all the great dome of St Peter's, seen as Michelangelo wished it to be seen, and as it cannot be seen from the front because of the portico. We saw, of course, the Mosaic workshops, where old craftsmen and young apprentices worked with forceps and knife, setting the fragments of stone in the rubbery preparation, the picture they were copying by their side. We saw the drawers of 36,000 different colours of stone, and we saw finished mosaics which were for sale, but for sterling or dollars, not for Allied Military Currency. We also saw a skilled workman repairing the roof where one of the bombs fell. Our guide assured us that it was dropped by an Italian Fascist, not by German or by British planes.

We walked round, and saw the perfect little railway station, administrative buildings and palaces. We went into courtyards dreaming of the past, and we saw young Vatican citizens playing on the lawns. Then we went into the Palace, through splendid chambers and rich corridors, past priceless pictures and tapestries, through Raphael's Loggia, through the Sala Ducale, the large Throne Room, the Consistorial Hall, and into the Pope's robing room, and private portrait gallery. To crown all, we had the Sistine Chapel opened and we surveyed Michelangelo's overwhelming 'Creation of Man' and 'Last Judgment'.

Easier to understand and appreciate was the Pope's coach-house with the various cars and carriages used by Popes during the past hundred years or more. In each was a throne of fine workmanship. There was something refreshingly normal, too, in a tour of the Swiss Guards' quarters, with their canteen, their Daily Orders and their cat with two kittens playing in the yard.

I remember the kittens, and I remember also a British high-ranking officer walking through splendid ante-chambers to be received by the Pope, accompanied by two Vatican officials. He had a wonderful 'take

it as it comes' expression on his face, and seemed to feel that it would be bad form to look about him in the house of a man he was visiting.

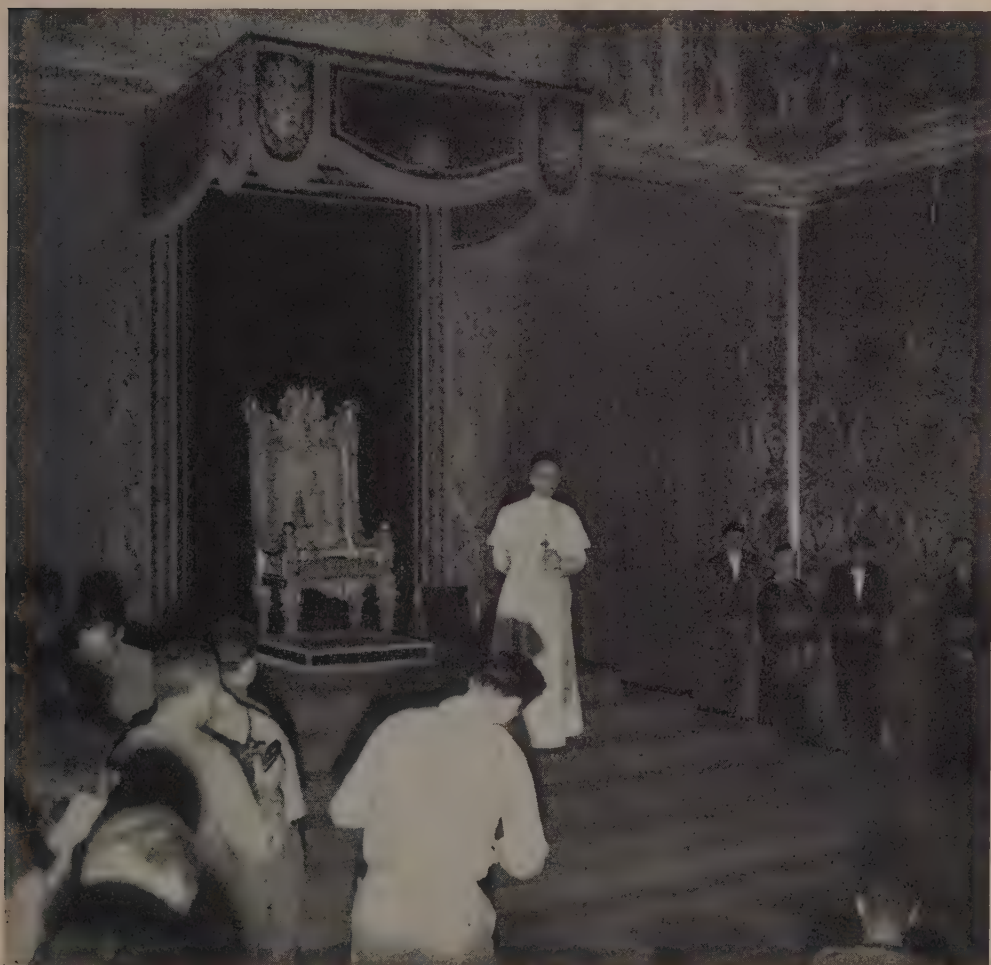
So my sight-seeing went on. In the Pantheon—where, as in St Peter's, one has to gaze and think if one is to see the wonder of the proportions—I saw Raphael's tomb.

The Royal Palace was surprisingly what one would expect; very large, with long corridors of glittering salons, ballrooms, dining-rooms and rare furniture.

The Castello Sant Angelo had a rich Borgia atmosphere, with secret trap-doors to deep dungeons, vast wood and iron studded treasure chests, thick doors and drawbridges. One remembered horrible tales of poison rings, sudden death and torture. But from the top,

where Tosca leaped to her death, one could see Rome well, including the place where, that very morning, a Roman mob had thrown the Fascist Donato Carretta into the Tiber. Later his body was pulled out lower down the river and he was hung by his heels. Looking over Rome, from the walls of this Renaissance stronghold, I almost understood the history of the lovely, turbulent city.

It was not until I saw Rome spread out below me from the plane, as Michelangelo never saw it but as Leonardo may have imagined it, that I realized what a great deal I had missed. But I had seen enough to feel that Rome, so splendidly at the disposal of her visitors, must make a lasting impression on them. Having seen Rome, I felt, one can never be quite the same again.



The Geography Under the War

by MAJOR PHILIP GRIBBLE

One aspect of modern warfare closely studied by military experts is the extent to which the natural barriers due to geography still affect strategy. Major Gribble, military critic of the News Chronicle, summarizes here conclusions which may be drawn from some of the major campaigns of 1940-44

PHYSICAL geography moulds the form of strategy today as it has moulded it from the age of paleolithic man. The only difference is in scale. A man's stride and a stone axe once represented all that there was in mobility and weapon power. Today science has multiplied these two factors many thousand-fold. Nonetheless, the fundamental problems remain the same. Seas and rivers, swamps and forests, mountains and plains, have had the same significance through varying radii of action in all ages; and all of them complicate military plans.

Not until the third phase of the war in France, in May 1940, was it generally understood that water-lines were not necessarily serious obstacles in the path of an advancing army. In September 1939 the absence of important water barriers west of Warsaw guaranteed the German armour ease of manoeuvre. The courses of the Vistula and Bug dictated the double assault on Warsaw west of the Vistula through Lodz and north of the Vistula and Bug from East Prussia. The main features contributing to the rapid German victory were the wide extent of the Polish plain and the absence of rain during the operations. The overwhelming advantage to be gained in an offensive by operating in level country, where armoured battles can be fought with the dash of cavalry and the freedom of the sea, underlines the extreme significance of enclosed country and water and mountain barriers as military obstacles. Briefly these were the conclusions to be drawn from the four weeks of Poland's campaign against insuperable odds.

In the spring of 1940, when Hitler sprang the assault on Norway, the odds then in favour of the Nazis wiped out the value of the campaign considered as an example of defence in mountain warfare. The German success was due to surprise, numerical and weapon superiority, long preparation in establishing fifth-column activities, command of the air and local command of the sea. In the first phase the use of paratroops and aircraft so disintegrated the defence that almost at once the outlook for the Norwegians was seen to be

hopeless, and the advantages which mountains normally bring to the defence automatically passed to the invaders. The gallant, hopelessly outnumbered British Expeditionary Force suffered from the effects of all these handicaps and the Germans used their superiority with supreme efficiency. The result was a foregone conclusion and the failure of mountains as a protection in Norway could not be supposed to have any future important parallel.

The campaigns in Poland and Norway did not shake the Allied faith in the effectiveness of mountain and water barriers. In the last phase of the Polish campaign, when Warsaw was enveloped, the Vistula was crossed at many points south of the city without serious opposition. But the ease with which these crossings were made was not thought to have any real bearing on similar operations in the west.

In due course the water-lines of Holland and Belgium were put into a state of defence. In Holland preparations were made for full use of inundation. Along the French frontier the heights of the Vosges were seamed with trenches and the confident garrisons of the Maginot Line slumbered in buried fortresses in the wooded undulations between the frontier of Luxemburg and the Rhine.

German strategy was ruled by the lie of the land. The call of level going was irresistible. Switzerland's forbidding frontier made the violation of Swiss neutrality unlikely. The Rhine through Lake Constance to Basle, with the Jura mountains between Basle and Geneva guarding the French frontier, weighted the scales in favour of the north as an avenue of approach.

The history of the German sweep through the Low Countries and France during May and June 1940 is too well known to need repetition. The level approach was chosen and many bridges remained intact; numerous important water barriers, such as the Albert Canal and Schelde, as well as the Lek, the Waal and the Meuse, were overrun without serious opposition. Blitz tactics seemed to have made a bubble of the traditional defen-

sive strength till then associated with water-lines. There were to be more bubbles: the Aisne, the Marne, the Somme and the Seine, were overrun with equal ease.

Since 1918 it had been said that England was no longer an island, a catch-phrase which events have happily disproved. In 1940 it seemed that commanders believed that a river was no longer a river, but Russian rivers soon revived the old tradition. In Egypt and Italy it was confirmed. The Dnieper, the Dniester, the Don and the Volga, the delta of the Nile, the Sangro and the Garigliano, and, during the last months of 1944, the Waal and the Meuse, have made history which confirms belief in water barriers as effective defensive lines.

* * *

In 1940-41 the Abyssinian campaign imprinted the names of Keren and Amba Alagi in every soldier's mind as classic examples of how to conduct modern mountain warfare.

The final battle for Keren opened on March 15, 1941. The natural strength of the Italian position had imposed a long period of waiting in which the British built up supplies. For eleven days furious fighting ebbed and flowed over the tracks and peaks of that mountain country. Curtain fire from the Italian heavy mortars, machine-gun fire and hand grenades failed to save Keren. Though this mountain position was strongly organized and determinedly held, it did not constitute a permanent barrier, but imposed on the advancing British a delay of more than eight weeks.

At Amba Alagi, on May 4, 1941, another British offensive opened. The peak of Amba

Alagi stands 10,000 ft. above sea level, surrounded by the rugged humps and bumps of innumerable lesser ridges and mountains. On May 18 the Duke of Aosta surrendered with all that remained of the Italian Army of Eritrea. Over three weeks were taken to bring about this final Italian defeat.

There was reason to conclude after these operations that given the best infantry, suitably trained and equipped, effectively supported by artillery and backed by sufficient reserves, no mountain barriers approachable below the snow line should prove insurmountable. It was equally evident that well organized mountain positions, even if lightly held, could still impose considerable delay on the progress of any force however high its quality. This conclusion was unaffected by air considerations, since aerial warfare in this campaign was negligible.

* * *

In the Italian campaign against Greece, which opened on October 21, 1940, the dominating influence of mountains on strategy was dramatically illustrated. The Italian offensive was launched from Albanian bases. Albania, it will be remembered, was seized by the Italians in May 1939, when King Zog went into exile. Advancing through Albanian territory the Italian forces moved towards Florina and Janina. They were met by a Greek counter-offensive across the Albanian frontier with its centre of gravity in the Florina sector. Here the Greeks shelled Koritza and in a series of savage actions showed how determined men can defend

The campaign in Italy confirmed the old tradition that rivers are still effective barriers to the progress of an army. These two photographs show how assault troops and armoured vehicles of the Fifth (left) and Eighth (right) Armies in Italy made river-crossings by pontoon bridge and ferry boat



All photographs from the Ministry of Information. Crown copyright

mountain passes. With winter to help them they stabilized the position for some months.

In March 1941 a well-prepared Italian offensive was launched on the central front, with Klissura as the main objective. The Greeks stood fast. In this fighting the Italians were said to have lost half their fighting men. They gained no ground.

The following April Germany invaded Yugoslavia, rapidly overrunning the frontier, which was unprotected by natural obstacles. Belgrade—after a merciless bombing—was occupied. The German armour flowed southwards, following the classic routes. The valleys of the Struma, Vardar and Morava echoed with the clangour of advancing tanks. Yugoslavia was isolated and soon forced to capitulate. Simultaneously Greece was invaded and by April 9 the Germans had occupied Salonika. They linked up with the Italians around Skoplje, and from here

threatened the Greek armies in Albania and Bitolj. Clearly the possibility of prolonging Greek resistance had ended. The Allied forces in Northern Greece were now obliged to withdraw. Their rearguard actions were fought from Mount Olympus and the Pindus Mountains southwards through Larissa, Lamia and Thermopylae to the Gulf of Corinth. The skilful handling of this retirement and the good use made of mountain features prevented encirclement and some 50,000 troops from the original force of 60,000 were evacuated.

What conclusions can be drawn from this fresh chapter in the history of mountain fighting? As in Abyssinia, where the superiority of British and Dominion troops made up for lack of numbers, so in Greece, Albania and Yugoslavia, superior German equipment and numbers, combined with air superiority, scored successes through mountain country at a speed which corresponded to the small re-



sistance available, and the extent to which that resistance was obliged to subdivide and deploy in the effort to cover the avenues of approach.

Without German intervention the mountains of the Greek-Albanian frontier would have halted the Italian invasion. Both Italy and Germany had been preparing for these campaigns for many years. Though the mountains of Greece and Yugoslavia were overrun, the discrepancy between the opposing forces makes it clear that mountain campaigns can never be undertaken lightly.

Events in Crete during May 1941 illustrate the influence of physical geography on air strategy. Stated in terms of air, Crete in 1941 was second only in importance to Sicily as a key to the control of Mediterranean shipping. The aerodrome at Maleme was totally inadequate to support the fighter aircraft necessary to defend the island against airborne invasion. Mountainous and rugged country had discouraged the construction of suitable air bases within Crete's 3000 square miles of territory. Libyan and Egyptian air bases were out of fighter range. Distance as a geographical factor became of supreme importance. The need for a sequence of air operational bases in depth was rudely brought home. The aircraft which could have saved Crete were grounded in North Africa by distance.

The Luftwaffe operating from ample Greek bases jettisoned their paratroops and landed airborne troops from hundreds of troop carriers and gliders. They descended in clouds around the aerodrome of Maleme and about the surrounding country. Eleven days after the opening of this airborne attack the defenders decided to abandon the island. Throughout these operations, heavy naval losses were suffered. Physical geography was on the side of the enemy. The gap between Crete and North Africa had won the Germans an important gain.

The North African see-saw between July 1940 and May 1943 showed how military operations depend on the lie of the land. In July 1940 the Italians were concentrating on the Libyan-Egyptian frontier. In May 1943 the destruction of the Afrika Korps was completed in Tunisia.

On September 17, 1940, the first Italian invasion of Egypt began. It was halted at Sidi Barani. The desert held the fighting to the coast, where sea and land communications could keep up the supply of fresh water which ranked in importance with petrol and ammunition. The following December British and Dominion troops joined in a counter-offensive. The Army of the Nile by February 9, 1941, had advanced over 400 miles and

reached the high watermark of their pursuit at El Agheila. Between March 24 and April 15, 1941, the greater part of this gain was lost. The enemy in his turn took the offensive. The Army of the Nile withdrew, to stand at Fort Capuzzo and Sollum.

Between November 18, 1941, and January 1942 the same journey was repeated in the reverse direction. Again El Agheila marked the limit of the British advance. By January 21 the Afrika Korps struck back, but this time were held up at Gazala. After four months, on May 26, they resumed the offensive. There were turning movements through the desert to the sea. The fighting in the 'cauldron' and the 'Knightsbridge box' was a new development in desert warfare. The absence of natural features which could be exploited in defence made necessary the creation of artificial barriers of the most primitive kind. A fortnight's uncertainty ended in a German success. The Eighth Army was forced back east of Sollum, fighting rearguard actions in succession at Sidi Barani, Mersa Matruh and El Daba. Finally the enemy was held between El Alamein and the Quattara Depression. This line was barely sixty miles west of Alexandria. Here the position was stabilized until the following October.

The enemy opened the battle of El Alamein, trying to forestall the Eighth Army's expected offensive. There followed the Afrika Korps' defeat and pursuit beyond El Agheila to the Mareth Line westwards to fight the last action in Tunisia. Throughout these campaigns the escarpment between Quattara and Sollum had confined the opposing forces to the strip of sand which lay below it. Up and down this strip, barely thirty miles wide, between the rising cliffs of the escarpment and the sea, the battle of Egypt swayed four times.

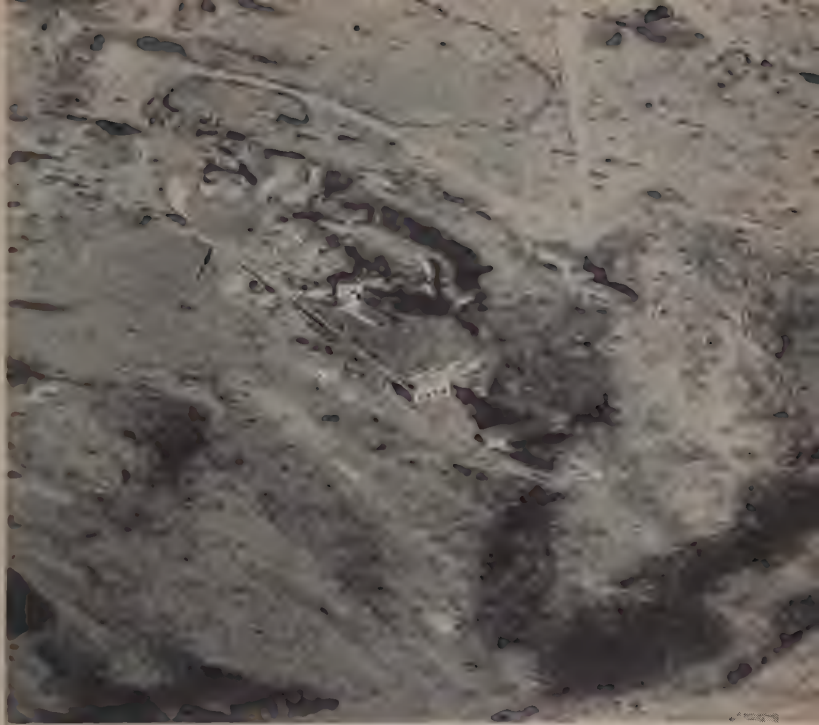
Between Sollum and Bardia there was little variation in the course of successive advances and retreats. Water and lack of water dominated tactics and strategy. Throughout these operations the Nile was the enemy's goal and the core of the defence.

The importance of the Nile in the North African campaign is paralleled in Europe only by the significance of the Rhine to Germany, the Vistula to Poland and the Volga to Russia.

In Russia, too, rivers played a prominent part. The main water barriers shaping the development of the campaign in Russia from west to east were the Polish Bug, the Dniester, the Dnieper, the Don and Volga. With the exception of the Volga all these rivers were crossed by the Germans between June 22, 1941, and November 19, 1942. The Russians struck the first blow of their great counter-offensive north-west and south of Stalingrad in November 1942. After that date these



(Opposite, top) *The humps and bumps of Amba Alagi: mountain country successfully crossed in the British offensive of May 1941: (bottom) a river bed provides rest and water for an Ethiopian battalion led by British officers in Abyssinia. (Right) An Italian post at Agordat, the mountain stronghold in Eritrea evacuated almost without a struggle when British and Empire troops worked their way round to the rear. (Below) Swamps and streams in Eritrea: a South African regiment laboriously transporting munitions and equipment*



rivers were recrossed by the victorious Russian armies in a series of successful offensives.

On the basis of these events it is sometimes assumed that the Russian campaigns have exploded the theory that river-lines can be successfully organized to stop the progress of modern armies. Without the great rivers which provided a succession of delays, and so gained time in which new armies were trained and equipped to launch stupendous blows destined to break the power of German arms at the end of 1942 and 1943, the story of the German invasion of Russia would have had a very different ending. It was in the Urals east of the Volga, in the security born of its wide waters, that the final preparations which brought about the German disaster were completed.

In June 1941 during the first phase the Germans crossed the Polish Bug and the Dniester at many points without strong opposition. These crossings were won as the result of surprise. At the centre of the eastern front the lazy-flowing Pripiet, with its numerous tributaries and wide expanse of marshy, roadless and sandy pine-treed country, dominated strategy and effectively divided the northern from the southern or Ukrainian fronts.

During July the Beresina river proved an obstacle which cost the Germans many days' delay at a time when the loss of even one might prolong the campaign by months.

The memorable defence of Leningrad was made possible by water barriers alone: the Gulf of Finland, the river Neva and Lake Ladoga. The northern hinge of the Russian line, though hard pressed for over two years, held firm. The protection of Moscow from the north defeated German aims. The projected envelopment could never be achieved. The heavy fighting on the Dnieper during August and September 1941 which preceded the fall of Kiev (on September 19) is an outstanding example among many great delaying actions fought on the approaches to Russia's river-lines. The narrow Isthmus of Perekop was a natural feature which enabled the Russians to break repeated German mass attacks and so delay the occupation of the Crimea for invaluable weeks.

In November 1941 the Russian offensive across the Don threw the Germans out of Rostov and pressed them westwards as far as Taganrog. The Soviet counter-offensive launched from the Don deferred the invasion of the Caucasus until the following year.

In the winter of 1941-2 Moscow was saved. Winter had converted the rivers of Russia into great highways on which ice-borne traffic could be carried hundreds of miles. The Russians knew how to exploit winter to the

full and their supply difficulties melted as the rivers froze.

In the spring and early summer of 1942 the river Donets and its tributaries became obstacles which the Germans learned to respect. It was not until July that the enemy, after Russian spoiling attacks, was able to mount a full-scale offensive, crossing lesser water-lines in a broad sweep towards the Don at Voronezh and Rossosh, and into the Don bend towards Kletskaya, so creating a close threat to Stalingrad. At Voronezh, between the Don and its tributary the Voronezh, during the following critical months a German defeat made possible the final Russian stand at Stalingrad on the Volga which marked the end of German hopes.

The German crossing of the Lower Don at Rostov and upstream at the end of July 1942 was the only occasion when one of Russia's great internal waterways failed to delay the enemy, a failure in the Ukraine as unexpected as the surrender of Tobruk in Libya. This success led the Germans to believe that the Caucasian oilfields were as good as won. With confidence they divided their strength, following two objectives, Stalingrad and the oilfields.

The Kuban river was the first important water-line to check German progress towards Baku. On the Kuban they met with increasing resistance. Finally crossing the river they fought their way through the foothills of the Caucasus along the Rostov-Grozni-Baku railway. The mountains on the German right flank gave Soviet troops the opportunity to maintain continual harassing attacks. The great number of rivers, streams and torrents which raced northwards from the Caucasian range created favourable conditions in which many other delaying actions were fought. The fighting on that swift stream the Terek saved Grozni. To the north during the same period the Volga saved Stalingrad and Astrakhan. The Volga was never crossed and Stalingrad's river communications remained open.

With a change in the fortunes of war the same barriers played an equally important part in reverse.

In the autumn of 1943 it was authoritatively stated that the Lower Don would mark the end of Russian successes. The Germans fought with determination for Kiev, Cherkassy, Kremenchug, Dniepropetrovsk and Zaporozhe. They were confident that they could hold the river crossings and save the precious manganese deposits of Nikopol and the coal and iron of Krivoi Rog. They failed, but they imposed a grave delay on Russian progress.

In the early stages of the Russian sweep towards Rumania in 1944 the enemy finally succeeded in tying down the Russian left on the Lower Dniester at a critical period. The collapse of Rumania later eased the Russian crossing of the Pruth and the Dniester.

Towards the end of March the Russians seemed likely to force the Jablonicka or Tartar Pass, so opening a short cut through Ruthenia into Czechoslovakia proper and Hungary. It was then that the significance of the Carpathians as a military obstacle became apparent, for Hungarian and German troops threw back the advancing Russians and prevented a crossing.

The Soviet armies followed the course of least resistance and swept through Rumania round the full length of the Carpathian chain following the right bank of the Danube into Hungary. Soon they made progress on both sides of the Danube from the point of its confluence with the Drava. Budapest was threatened from a new direction and the Lake Balaton line guarding the approaches to Vienna from the south-east seemed likely to be overrun. Meanwhile the Carpathian passes one by one were slowly yielding a passage to Russian troops from the north. During November and December there was heavy fighting for the Dukla Pass, linking the Russian forces in Hungary with those in Southern Poland.

From the supply angle the Danube must prove an invaluable asset to our Allies. In its lower and middle reaches it paralleled the Russian advance and it was only south of Budapest that the Danube was used as a water obstacle. Here the Germans fought on the river to delay the Russian advance.

The Carpathians during the last few months have borne out the tradition that mountain passes can be effectively defended.

* * *

The Italian campaign which began on July 10, 1943 with the invasion of Sicily is another record of strategy limited by geography.

The choice of landing points in Sicily and Italy was confined to an area within the radius of fighter aircraft. In the first phase such aircraft were based in Tunisia and Malta. Suitable beaches within that radius were few. A beach without access to inland communications was useless. Commanding ground from which landings could be kept under observed fire from any considerable distance inland had, if possible, to be avoided. The choices made were the right ones.

During the subsequent conquest of the island the outstanding delaying action was fought around Catania and the base of Mount Etna, where close country, vineyards and

steep mountainsides were admirably adapted for prolonged defensive tactics.

The campaign in Italy threw into prominence the river lines of the Volturno, Garigliano and Liri on the left flank of the Fifth Army, and on the Eighth Army's right flank the Biferno, the Sangro and Pescara.

One of the chief difficulties in this mountain fighting was supply. Primitive improvisation had to take the place of mechanization. Often three-quarters of a battalion's strength might be used in man-handling supplies up the mountainsides to the fighting line. It is not surprising that the campaign did not make more rapid progress.

The same set of circumstances that influenced the invasion of Italy was responsible for the choice of landing points in the Allied invasion of France. The narrowness of the Cherbourg peninsula was fully exploited by the enemy. Between Caen and the west coast of the peninsula the Germans fought with desperation to prevent the Allies from breaking out. They relied on the formation of the coast and the holding of harbours to put an end to Allied supplies.

The natural harbours on the coast of Northern France were known to be so well defended that the early occupation of any of them was admitted to be impossible. Science in two years of preparation got to work and the Allies were ready to spring a surprise on the enemy which wiped out this disadvantage. Artificial harbours towed in sections quickly converted open beaches into safe anchorages.

In the open country of Northern France, Allied armour, particularly adapted for a swift-moving campaign, again and again carried out encircling movements, cutting communications and smashing up resistance from the enemy's rear. The only French water-line, apart from the Caen Canal and many small streams, which was strongly contested was the Lower Seine. Here air superiority and massed artillery combined to win bridgeheads from which the enemy's river positions could be turned.

The German retreat became a rout. It was not until distance began to tell, as it invariably does after a few hundred miles, that the pursuit slackened, in Belgium and Holland. The Allies outran their supplies. The Germans with the sea at their backs still clung to the Channel ports and so prevented a shortening of the Allied lines of communication.

The delay gave the enemy time to re-group and prepare for the final battle of the rivers, the Waal, the Meuse, the Roer, the Saar and, the last great barrier of all, the Rhine.

The History of the Strange Stapelia

by T. RITCHIE and LEONARD WOOLF

If you are a Londoner and a plant lover generally, a person who feels the peculiar attraction of groundsel at one end of the scale and an opulent orchid at the other, you will probably often in some dingy and depressing London alley or back street have gazed at the inhabitants of the not uncommon, small flowershop which seems nearly everywhere able to maintain a precarious existence. The inhabitants are themselves a dingy, depressed, and therefore depressing flora—a withered clematis in a pot, a bundle of thorny sticks labelled 'climbing roses', a wilting aubrietia or other 'alpine', 'bedding plants' of sorts languishing in boxes. These are in the window or overflowing on to the pavement. If you pry a little further, you may find a shelf reserved for cactuses, and sometimes among the cactuses you will come upon what appears to be one of the dingiest, most depressed and undistinguished plants imaginable, made up of two or three smooth, dirty green, rather formless segments. It is a stapelia.

Nothing could be more different from the gloom of a London day in winter and the grime of a London alley than the natural habitat of the stapelia and its climate. And no one could guess looking at that drab plant

in its little pot that, in all its habits from seed to flowering maturity, it is one of the most interesting, original, and fantastic of plants. Its vigour and stamina are astonishing. It comes from the hottest and driest spots in Africa and Asia, but will survive in a London alley when roses and clematis are dying all around it. Its seeds germinate more quickly than those of any plant we have tried to grow from seed; we have known them to burst into life forty-eight hours after they were sown in a dull autumn in Sussex, though their natural place of germination is really an African desert. If sown in a pot in a more favourable climate, they will often germinate in less than twenty-four hours.

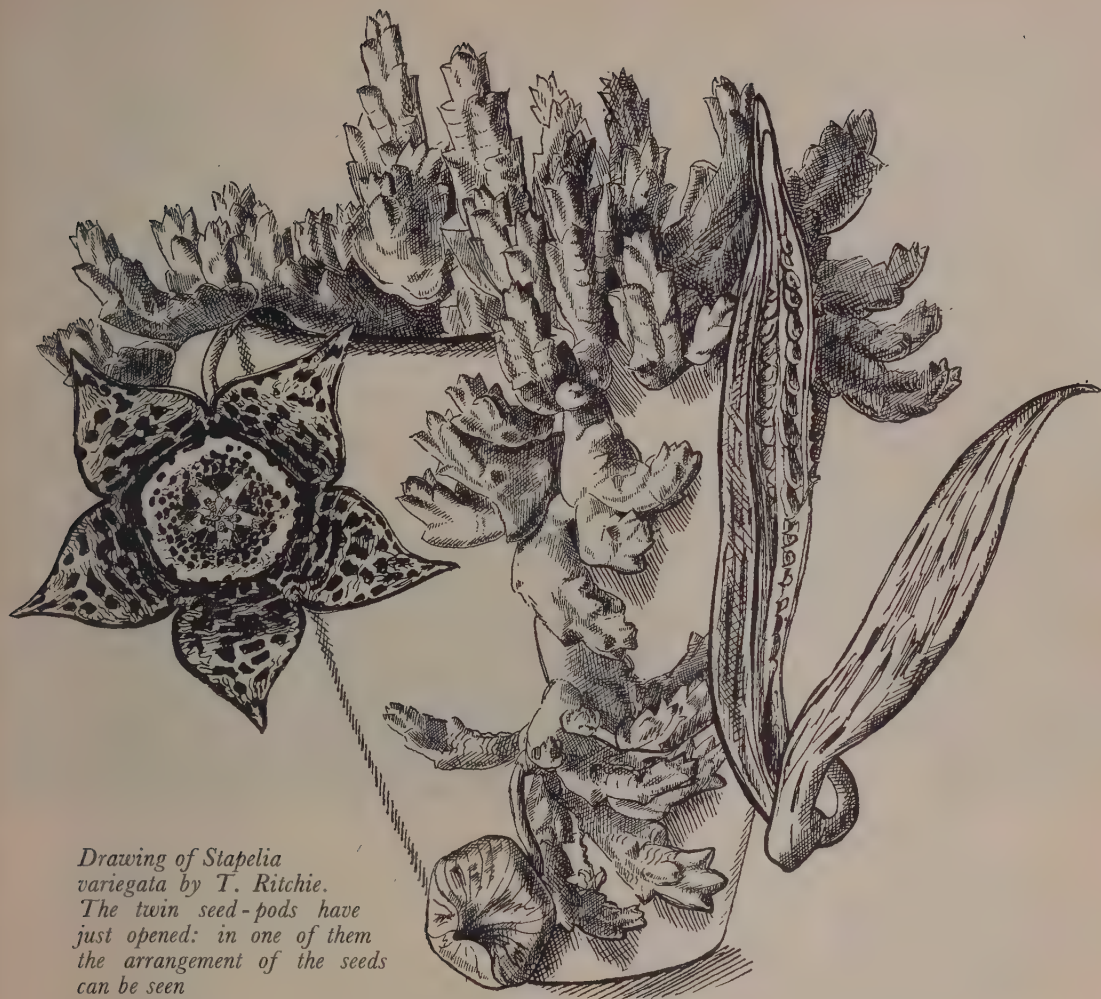
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The stapeliad is widely distributed in Asia and Africa, and from Africa it has even succeeded in penetrating to and establishing itself in one circumscribed district of a European country. The traveller in Spain from Almeria to Alicante through Murcia finds himself in surroundings in which the heat, the sand and rocks, the flora all remind him of North Africa. And here he may find growing two species of the stapelia, *Caralluma europaea* and *Caralluma munbyana*. The variety of *Caralluma europaea* which grows in Spain is *confusa*; other varieties are found upon the little island of Lampedusa and on the northern coast of Africa. The other European species, 'Munby's *Caralluma*', discovered in 1847 by Giles Munby, is found in only one place in the province of Murcia, but is fairly common in Algeria and has been found in Morocco.

The stapeliad's ability to travel and to establish itself if it finds a congenial desert is shown by the fact that three species are indigenous in the sandy, forbidding island of Socotra in the Indian Ocean. But Socotra and Murcia are the plant's *tours de force* in its art of finding a home. It is in South Africa that it shows what it can do in numbers and variety. It is found all over South Africa, but it is most abundant in the Great and Little Karroo. In the western area of the Great Karroo, for instance, where the rainfall is in places less than ten inches, over fifty



Paul Popper



*Drawing of Stapelia
variegata by T. Ritchie.*

*The twin seed-pods have
just opened: in one of them
the arrangement of the seeds
can be seen*

species have been found. Another place where it is equally prolific is South-West Africa. But it is at home, too, in the Rhodesias, in Angola, the Belgian Congo, all the territories up the east coast of Africa to the Somalilands, and thence to Ethiopia and the Sudan.

The stapeliads of Asia are confined to India, Burma, and Ceylon. It has been conjectured that they originated in India and spread thence across Arabia to Africa. The theory of an Indian origin is made probable by the fact that in India there are only twelve species and all of them except one, *Frerea indica*, belong to the genus *Caralluma*, whereas in Africa there are twenty different genera. The one Asiatic species which is not a *Caral-*

luma, *Frerea indica*, is remarkable because it is the only stapeliad which has true leaves and it is not found outside India. It seems, therefore, probable that the first stapeliad belonged to the genus *Frerea*, that it originated in India, and that from it developed the genus *Caralluma* in India. Thence it spread to Africa and its travels through so many diverse climates and countries, some of them peculiarly suited to its development, encouraged the enormous differentiation which has resulted in its new homes.

The range of the stapeliad in India is from Baluchistan in the north to Madras and Bombay in the south, but it is not widely distributed, being mainly confined to certain dry localities in the Punjab, Baluchistan,



By courtesy of South African Railways and Harbours

Photograph of a segment of Stapelia variegata with a flower in full bloom shown against a view of the high, hot, windswept expanse of the Karroo near Kimberley

Madras and Bombay. Alain White and Boyd L. Sloane in their monumental work, *The Stapelieae* (published in three volumes in California), say that *Caralluma tuberculata* probably also grows in Peshawar and Afghanistan. In Ceylon only two species have been found, and one, *Caralluma umbellata* (in Trimen's *Handbook of the Flora of Ceylon* it will be found under the name *Caralluma campanulata*) is very rare. The other is *Caralluma adscendens* var. *fimbriata* (called *Caralluma fimbriata* by Trimen); it is rather rare in Ceylon, but has been found on the Kandy-Badulla road, in the Eastern Province, and in that strange, dry, sandy island of Mannar upon whose shore Mohammedans still tend the tombs of Adam and Eve.

The stapelia has really no right on a shelf reserved for cactuses, for, although a succulent, it is not a cactus. The stapeliads belong botanically to the largish family of Asclepiadaceae. The family has no representative in the flora of Britain, but it is closely allied to the family of Apocynaceae, which in Britain is limited to a single genus, the lowly and lovely periwinkle. The Asclepiad which is probably best known to English people is the stephanotus of our greenhouses.

Asclepiads have two marked characteristics which account for some of the fascinating habits of the stapeliads. The seeds are contained in twin pods which grow out of the plant, like two great horns, and have earned for them the name of 'cow's horns'. The second peculiarity is in the reproductive system. The pollen forms waxy lumps and these are attached to an organ called the pollen-carrier which is peculiar to the family. The fact that the pollen is in lumps has set the stapelia a difficult problem in fertilization: how to transfer a solid lump of pollen to the female organ so that the seeds in the ovary may be fertilized. The stapelia has solved the problem very ingeniously. First, it has developed a scent which to human beings is a horrible stench, midway between a foul drain and a dead rat, but highly attractive to flies. Secondly, the pollen-carrier is so constructed that it traps a fly's legs and, when it pulls its leg out of the trap, a pollen mass has been skilfully attached to it. If the fly then visits another flower, another ingenious trap near the female organ catches its leg again and it can get it out only by leaving behind the pollen mass precisely in the one place where it can fertilize the seeds.

Almost every thing about the stapelia is surprising, but not least its flowers. Take, for instance, a specimen of *Stapelia variegata*, the first of the tribe to be brought to England and still perhaps the commonest inhabitant of the cactus shelf in London shops. It is an undistinguished looking plant, as we said, leafless and composed of short, smooth, fleshy segments, covered with small protuberances. If you put one of these small segments in a pot in your greenhouse and leave it severely alone, except for an occasional watering, it will add segment to segment, descending in a cascade down the side of the pot. And one day suddenly out of a segment will appear a bud on a short stalk, and, if the weather is warm and sunny, the bud will grow rapidly and open into the remarkable flat, geometrically patterned, purple and gold flower of which we give a drawing.

The number of genera of stapeliads is very

great and there is immense variety in their flowers. The flower of *stapelia variegata* is strange and beautiful, but there are other species which far exceed it in strangeness and beauty. Among the finest are the hoodias from whose stout spiny stems burst, in some species profusely, large delicately shaped flowers, purple, pink, red, brown or yellow. Perhaps the most wonderful stapeliad is *Caralluma retrospiciens* which comes from the Sudan, Ethiopia and Somaliland. On the top of its smooth stems, which are about two feet high, appear masses of buds in an umbel which forms a large round ball. When the buds open, the umbel of 100 or more closely packed purple flowers is often four inches in diameter.

The seeding of the stapelia is as fantastic and beautiful as its flowering. The flower withers and then if the seed has been fertilized out grow the two great horns. These seed boxes in *Stapelia variegata* are about four inches long. The seed pods split and open longitudinally and inside each segment are hundreds of seeds, each tufted with dazzling white, silky hairs. The folding and packing of these delicate seeds in the narrow pods is a miracle of ingenuity, neatness, and beauty. But still more lovely is the sight of these silky seeds unfolding their hairs and gently drifting away before the slightest current of air in gleaming flocks or flights. The enormous number of seeds in each pod and the way in which the lightest of winds will send them floating away great distances through the air account for the capacity of the stapeliad to distribute itself over such immense areas.

* * *

There was a stapelia among the first handful of flowers collected at the Cape of Good Hope. In 1624, when the Dutch East Indiaman *Gouda* anchored in Table Bay, Justus Heurnius went ashore. At that time there was no settlement at the Cape; there was nothing but a hole with a stone over it where passing ships left their mail when they put in for water. Heurnius was on his way to Batavia from Holland, filled with a missionary zeal to preach the gospel in that colony and to collect the souls of natives and colonists for the Lord. But on that day when he went for a walk up the rocky slopes of Table Mountain he collected not souls but flowers.

He took his bunch back to the ship and made careful drawings of them which he sent to his brother, a doctor in Leyden. The brother sent them to Johannes Bodaeus Stapelius in Amsterdam. Stapelius was pre-

paring an annotated edition of Theophrastus's *De Historia Plantarum*. He included Heurnius's drawings in this book, which was published in Amsterdam exactly 300 years ago (the stapelia appearing there as *Fritillaria crassa*), and these are the first drawings made of flowers from the Cape. The drawing of the stapelia appeared with slight changes in various later works, always as *Fritillaria crassa* until Linnaeus renamed the genus after Stapelius the chronicler rather than Heurnius the collector, and called this species *Stapelia variegata*. Some amends were made to Heurnius later when another genus of the Stapeliads was named after him Huernia (though his name was mis-spelt).

Between Heurnius's visit in 1624 and Thunberg's in 1771 only three new stapeliads were added to *Stapelia variegata*. This is strange since 765 Cape flowers are mentioned in Hermann's list, 1670-77, and Burman in 1737 added another 350 from the discoveries of Oldenland and Hartog. Perhaps the very oddities of the genus kept people off. Lady Anne Barnard bought one when she was at the Cape in 1798 and she describes it as "a fine large starlike plant, yellow and spotted like the skin of a leopard, over which there grows a crop of glossy brown hair, at once handsome and horrible; it crawls flat on the ground and its leaves are thick and flat".

In 1771 the returning expedition of Captain Cook stopped at the Cape. The enormous number of interesting and unknown plants impressed his naturalists, and on their return Sir Joseph Banks interested George III in the plan of sending a gardener out to collect plants and seeds for the collection at Kew. In 1772 Francis Masson, a Scotsman, was chosen for this purpose. He spent two and a half years at the Cape on his first visit and went on expeditions into the interior in the company of the young Swedish botanist Karl Peter Thunberg. If Thunberg is "father of South African botany", as he is called, Francis Masson is father of stapeliads. He added thirty-six new species to the four already known. These expeditions into the interior are described by Thunberg in his *Travels*, in which Masson appears described as "my English fellow traveller". They also went on short expeditions from the Cape with Lady Monson, who was on her way to join her husband in Bengal; she was, says Thunberg, so keen a naturalist that she had

engaged a draughtsman to accompany her from England to record her specimens.

Masson went home to England in 1775 and returned to the Cape in 1786. This time he stayed ten years, but made no extensive expeditions. He lived near Cape Town and established a little garden for his plants, and from this he sent seeds and plants to Kew. These specimens sent home by Masson started a cult in stapeliads and they became popular conservatory plants. Plates of the flowers and descriptions of their culture occur in the early numbers of Curtis's *Botanical Magazine*, and they remained in high favour until about 1830, when interest in them gradually declined.

After Masson the study of Cape flora became more and more popular and attracted many different travellers across the wide plains in search of new specimens—William Paterson, Dr Martin Lichtenstein, and in 1806 the charming William Burchell. Burchell's book (*Travels in South Africa*, 2 vols., 1822-4) has never been republished, nor has he received the recognition which he deserves as one of our most cultivated and enlightened explorers. His journey into the interior of the colony, undertaken alone with a few Hottentots, was a remarkable achievement. He went north, nearly as far as what is now the southern boundary of the Bechuanaland Protectorate, with his covered wagon carefully arranged for collecting specimens. His book recording his journey also gives a very clear picture of himself, so calm and benevolent, delighting in the new scenes of beauty around him, sitting up late at night alone in the middle of Africa in his wagon making up his journal for the day and listing his specimens, his Hottentots sleeping near with their feet towards the fire. Burchell is a figure in the botanical history of the colony, but not strictly in the history of stapeliads. He mentions them twice, but perhaps on so long a journey as his they were rather hard to preserve and so he did not collect them. Or perhaps he and other early travellers passed them by because of their habit of growing in the shade of bush or tree or rock—the brilliant African light making them the harder to see in the shadow—and this may be one of the reasons why so few new specimens were found during the 162 years which elapsed between the visit of Justus Heurnius and the establishment of Francis Masson's little garden at Cape Town.



Photographs, with one exception, from the Ministry of Information

Kew Gardens

The Royal Botanical Gardens at Kew were originally the private gardens of Kew Palace. George III's mother started the collection of foreign plants, and the gardens were presented to the nation by Queen Victoria in 1840. The main museum is shown above



G. S. Weddle

The Gardens occupy nearly three hundred acres and are a source of joy to hundreds of Londoners, many of whom make seasonal visits to see their favourite flowers in bloom : magnolia time, early in the Spring, draws some of the biggest crowds

The largest of the ponds at Kew was excavated to provide soil for an embankment on which the Palm House stands. It is stocked with fish





*The Arboretum propagator budding
(left) and grafting (above) from an
old apple tree onto young stock*

*The giant water lily, grown under
glass, flowers in July or August.
Its leaves are covered with prickles*





This *Sophora Japonica*, one of Kew's oldest trees, is the only survivor of five brought to England in 1753, and has frequently to be doctored in order to have its life prolonged. On the left, rotten wood is being cut away and the hole will afterwards be filled with concrete, as is the one in the middle of the sawn off area above the operator's chisel. (Opposite: top) A scientist scrapes pollen from a South African marigold onto a glass slide; to be used in research on hay-fever in human beings; (bottom, left) the keeper of the Herbarium identifies a specimen by comparison with dried plants from his files; (right) chips cut from potatoes, used as experimental seed, are dried in boxes of peat: the drying takes two or three weeks





Looking through the portico of King William's Temple at a perambulating stork. One of the greatest attractions of Kew Gardens is the birds, particularly the song birds in Spring

More English than the English

New Zealand Victorians

by H. M. ROLLESTON

BEFORE the last war there existed in New Zealand a society whose character has to some extent escaped record. Later than the pioneers, not yet full-grown New Zealanders, this generation had a flavour which has been overwhelmed by interest since given to social legislation and primary products.

The last thirty years have broken up this charmed circle, and the old names that went to form it are now spread abroad over a population infiltrated by many outside elements. Rigid in standard, most proper in behaviour, it brought from England much of the atmosphere of a Charlotte Yonge novel. The immortal precept of Dr Spencer in Charlotte Yonge's *Daisy Chain*, "Ethel—when relations live in the same neighbourhood 'I should have thought' is a phrase to be avoided", finds a parallel in the lady who said to her daughters at the slightest deviation from the orthodox, "My dears, why will you do things that I daren't mention and can't defend", and whose wisdom formulated the invaluable advice, "Never describe yourself either in your bath or your bed".

The conventions of the group yielded to none. Visitors, however important, could not introduce new codes. A famous lady who showed emotion in public, or a peeress who wore yellow stockings and leaped fences without restraint, were not imitated but set aside.

Among the men the codes of an Englishman's integrity, learnt at the time of Charles Kingsley and his school, were the more steadfastly maintained in that they must be taught in a mixed community; and when the new generation took up the tradition, they adhered to its principles of conduct with the fierce loyalty of an isolated group.

The men worked hard—the 1880's and 90's were thin times—and the only recreation was an occasional race meeting at which the whole community gathered for two or three days' racing and dancing.

Dress was punctilious. Old ball dresses were worn out for dinner at home, and the men's white gloves

made excellent linings for gardening gloves. Rounds of visits were paid in the summer, and the girl who wished to be popular with her host kept her luggage small enough for the dog-cart which met her. Girls were favoured and more often "went home" than did their brothers. Their life was almost entirely social and domestic, seldom including those services to the poor which occupied their English contemporaries. Entertainments were few, but chaperones were numerous. Hair was strictly down till the age of eighteen, and when it was up Christian names vanished, even among men who had pulled it in the schoolroom stage.

The mothers were never intimate among themselves. However much they might have shared each other's joys and sorrows, lifelong friends were always 'Mrs' one to the other, and 'Lady' when the knighthoods came; and some children grew up hardly conscious of their mother's Christian name.

In many of these exiles' homes the English mail was the principal event of the month. Women separated by stretches of years from the sisters and brothers most dear to them pored over long closely-written letters, picturing the children they had never seen, and spent hours writing descriptions of their own, and precious times of leisure pacing by flower-



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All the sketches illustrating this article were made by Dr Alfred Barker, who, with his family, reached New Zealand in the Charlotte Jane, one of the first four ships to make the voyage and give settlers the standing of Mayflower Pilgrims. His first house, shown opposite, was built of packing cases and the studding-sails of the Charlotte Jane, and was known as 'Studding-sail Hall'. (Above) The original homestead near Christchurch of the Deans, a Scottish family settled on the plain before the arrival of the first four ships. One of the Deans was a famous Rugby three-quarter, well known to English crowds in the days when the N.Z. 'All Blacks' first showed their form. (Below) The second anniversary ball of the Canterbury Settlement, held on December 16, 1852. The figures are probably all portraits



2nd Anniversary ball Dec 16 1852

the Lower office Christchurch



The outside and (right) the inside of Studding-sail Hall, with Dr Barker's wife, sister and Arthur, the youngest of his children born in England. On completion, the house was tarred and was then called by the irreverent 'Beelzebub'. When Dr Barker, who was the son of a Victorian dean of Hereford and became official Doctor to the Canterbury Settlement, heard of photography he took it up with enthusiasm, making his own materials. His ardour was such that he stripped the house of its window-panes, which he used for plates, substituting sheep-skin scraped to transparency for the windows. Five more children were born to the Barkers after their arrival in New Zealand, all of whom settled and brought up families of their own in Canterbury. The eldest daughter was the first child born in the settlement. Her christening, in a pie-dish, is mentioned in the article





(Above) The outside and interior of the original church of the Canterbury Settlement on the site of which St Michael's Church now stands. It was in this church that the inauguration of Bishop Harper described in the article took place. (Opposite, top) The Election for the first Superintendent of Canterbury which resulted in the return of James Edward Fitzgerald. Four Superintendents held office in Canterbury before the abolition of the Provinces: Fitzgerald, Beasley, Mossbourne and Rolleston, after whom four avenues which form the boundaries of the city of Christchurch are named



All drawings reproduced by courtesy of Brigadier R. E. Barker, C.B.E.



(Above, left) George Sale, a Fellow of Trinity, Cambridge, who came to New Zealand in the 1860's in search of health and was in turn station manager, journalist, Administrator of the West Coast Goldfields and finally, reverting to his natural sphere, much loved Professor of Classics in Otago University, a post he held for many years; (right) Sir Julius and Lady von Haast. He was a distinguished geologist and explorer, an artist, writer and merchant, born on the Rhine, sent to New Zealand in 1850 by a London shipping firm to prospect for a German immigration. He explored in the South Island, where a mountain, a glacier and a river are named after him

beds filled with the scents of home, planning how these sons and daughters should visit their cousins. Listening to the eerie sough of the rising nor'wester in the pine needles of the shelter trees, a mother would promise herself that her daughters should know the thrill of a London season, should see the glory of primroses and bluebells in an unfolding wood, and hear nightingales in copse and thicket. The rising generation was well trained in this anticipation, for its literature was entirely English.

No books about local conditions were published until well on into the 20th century, and children were brought up on Mrs Ewing, Mrs Molesworth, Charles Kingsley and the *Little Folks* and *B.O.P.* of the year. Hence the scenes pictured in their pages became more real than everyday events to a vivid imagination isolated from companionship. The green meadows, wild roses and primrose-picking of these stories, the pictures of Piccadilly crowds for a Jubilee, the charge of the 21st Lancers at Omdurman, Boulton's Lock on Ascot Sunday of the *Illustrated London News* made a living interest; while the tri-weekly ride for the mail over flat yellow tussocks between wire fences was just something you did. For the grown-ups, the yearly Kipling and E. F. Benson, with Gilbert Parker, Anthony Hope and endless biographies and memoirs, centred leisured thinking in the Northern Hemisphere. The great classics had laid the foundations of literary style, and were at once a moral warning and an example, and a refined view of America was obtained through the works of Winston Churchill. As political control passed from this group to the long-lived Seddon Government, progressive and ruthless, the internal politics of England, as well as her Imperialist adventures and conflicts, became the principal interest and subject of conversation. It was tacitly agreed not to take too much notice of Mr Seddon when he was advertising his policy.

For the young, life developed largely in anticipation of "going Home" to England, and taking part in the things they read about. 'Home' is a word that has never changed for the New Zealander, and even the present generation whose parents may never have 'crossed the line' say "So you're from Home" to the visitor.

The motor car, breaking the isolation and introducing new elements, made the first major change in this society; and the four years of the last war rent asunder the generations and produced, in the years of boom, a way of life unbelievably different from that of the previous decades, which had spread all over

New Zealand, but was most definite in character in the Canterbury Settlement, a society made up of men and women pledged among themselves to found a Utopia in the Antipodes.

The originators of the Canterbury group laid down first that its members should be Church of England only, an idea at once naïve and a little horrifying to our modern thinking. This restriction was soon lifted, but the high standard of character of the settlement never varied, and the idealism of the people who thus bound themselves together to serve the highest they knew has had a lasting effect on the history of New Zealand. Though politics swung to the extreme left in Canterbury, the welfare of your neighbour before your own remained the ruling motive of social development. "Lord, lay not this sin to my charge," one founder of liberal land legislation records himself as saying when, during a mountain ride over country under his care, he saw east and west and south and north thousands of acres the property of a few men.

Social legislation in New Zealand has been a liberal crescendo from the beginning: Land Bills, Women's Franchise, the Arbitration Act, up to the legislation which established present wage levels, and the subsistence provisions which have provided a model for some of the Beveridge proposals.

The stronghold of pure English Conservatism in the Antipodes, which shuddered to its core at the prospect of the Socialism and class criticism advancing upon them steadily from the days of Seddon to its culmination under Savage and his colleagues, perhaps did not realize that a true idea never fails to reach a logical conclusion and that they themselves had laid the foundations of this system which developed so uncontrollably.

This article, however, is concerned with the human story of the men and women who brought the ideal of equality and plenty to a new land, and carefully and modestly strove to that end. Most of them are now forgotten, and are commemorated, here only by a little gravestone saying "Looking for a better country", there, by a sundial inscribed "The wilderness and solitary place shall be glad for them". They bore to their mother country "an unchanging love in a far-off land", and their great desire was to perpetuate the advantages of the best of England where it might flourish without being hampered by any of the drawbacks.

It must have taken much faith to bring English song-birds in pairs on a four months' voyage in a sailing ship; but enough survived



(Above) One of the early parish churches of Christchurch, capital of the Canterbury Settlement, built of corrugated iron. Snow is rare on the Canterbury plains and this picture was taken in the famous snowstorm of 1896. (Below) 'Mr Cassidge's coach', the only method of transport from Canterbury to the West Coast in the decade of 1890. (Right) Mr and Mrs Arthur Barker outside their house in South Canterbury. The waggonette and cream and white ponies were well known on the flat roads of Canterbury





Grand Avenue—30 miles long on the West Coast Road—in 1888. In the bush may be seen the great tree-ferns in which the tui or parson bird sings his liquid song with a court of imitating bell-birds round him. Note the iron frame-work of the cart over which these travellers in 1888 would spread canvas to sleep at night

to fill New Zealand's temperate South to an embarrassing extent. Despite the "small bird nuisance," as it came to be called, it was a taste of home to hear the wheezing tweet of goldfinches building in the giant currant bushes of the kitchen garden, or in the evening to listen to a thrush pouring out his song, swaying on the alien spike of a *Pinus insignis*.

There were many names in the New Zealand of this period already known at home—Acland, Tollemache, Tancred, Fitzgerald, Wynne Williams, Somers Cocks. Few of these survived the wave of financial disaster which overtakes pioneers in every walk of life. Many of them saw other men inherit the fruits of their planting, but the standard of the first settlers remained as well as the names they gave to the lands they first took up: Haldon, Holnicote, Mount Algidus, Ilam, Frimley, Newlands Corner, Christchurch-on-Avon.

Beside the families who brought with them

the atmosphere of the landed gentry and village life of England, there were the people who left few roots at home and were inspired by a burning desire to try out theories long frustrated by the persistence of old systems. Over both North and South Islands their names are associated with foundational legislation: Atkinson, Bowen, Brittan, Richmond, Rolleston. In the group seeking health was George Sale, later classical professor of Otago University, who in his early days in the colony ruled the turbulent miners of the West Coast as 'King Sale'. He has told the story of his arrival at the port of Lyttelton with other young men who were so delighted with the appearance of the country they had chosen that they made their tall hats into a bonfire and danced round it on the barren shore.

Two leading families of this same class formed something of a clan, domiciled chiefly in Wellington. They were advanced and vigorous thinkers, practising Socialists, and

distinguished artists and writers. They experimented in all the practices dear to those whose hearts overflow with brotherhood and pure idealism, though it is possible that the women of the clan regarded these experiments more temperately than did their men.

"Mary," one redoubtable lady is known to have said to a trembling and incompetent emigrant, "in the Kingdom of Heaven you will doubtless walk before me, but while we are here the saucepans must be scoured daily." Sledgehammering a walnut—betokening perhaps the nerve tension arising from a constant struggle with small things, but none the less the sons of the family cleaned their own boots; this matriarch would permit no woman to do it for them.

Two other groups belonged to the North Island: a small Jewish one, regarded wholly without prejudice, who lent colour and resourcefulness to a community otherwise rather over-English in its disregard of ambition; the other, missionaries, established long before any other settlers, who, supreme in influence with the Maoris, lived apart for many years. Perhaps they saw their worst fears for their loved converts realized in the summing-up of a Maori chief when advising his people to throw off orthodox Christianity, "The missionaries came and taught us to pray, and while we were looking up to Heaven the traders came and took away the land from under our feet."

The missionary story is greater and nobler than can be told in this article, but the missionaries were among the elements which rubbed against one another in the early stages of the community, and finally emerging from the pioneer stage produced that society which a visiting English statesman described as "poor, proud, religious and no servants". "No servants" was rather sweeping—it must have been a bad period, for in the twenty years preceding the war of 1914 there were servants. There were not often more than two to a household, but they wore the long-tailed caps and starched aprons of their English contemporaries, and did an astonishing amount of work.

Religious the community certainly was, their society coloured with the events and seasons of the Church they loved. Selwyn, the original of Norman May in Charlotte Yonge's *Daisy Chain*, was the first bishop of New Zealand and did memorable work in organizing both islands. Later came bishops of the separate provinces.

The arrival of the first bishop of Canterbury, with his beautiful wife and numerous

daughters, was a great event to the young men of the settlement, who are reported to have waited in the plain below while the Bishop came down the bridle-path over the Port Hills between Lyttelton and Christchurch, with his string of daughters behind him. The little wooden house to which they went on arrival stood for many years near the public library. Here, in the attic, four of the daughters slept, their side-saddles over their heads and their ball dresses pinned up in muslin on the side-saddles.

During the service of welcome to the Bishop, attended by all the community, two young run-holders of the mountains sat together observing the daughters. As a particularly charming one took her place, one young man said excitedly to the other, "That's mine—that's mine," and carried out his conquest without much delay. The other friend married another sister, and these two families lived each in a river gorge on either side of one of the mountains of the South.

From one of these houses I have ridden in the early hours of the morning up the winding Orari gorge, the moon lighting up the long string of riders picking their way in and out of the streams in the wide shingle bed. When dawn came, mingling with the moonlight the swelling brown hills became mouse-coloured and enlarged, and gulls from breeding grounds higher up floated down the gorge on steady wing. Keas cried hoarsely from among the great boulders on the mountainside, and the sharp thrilling bleat of sheep nosing in the dew cut the infinite stillness.

On the other side of the mountain was built Holnicote, facing the great Rangitata river as it pours out of the gorge described by Samuel Butler as leading to 'Erewhon'. Through this back country Butler came, found his "land of broad rivers and streams" and called it Mesopotamia because it lay between the two rivers.

Here was England transplanted. Though wild winds roared down the gorge and round the gabled brick house, and the songs of tui and bell-bird mingled with thrush and black-bird, the garden was full of English trees, delicate against the dark evergreen of the native bush which covered the mountainsides. How deep and aromatic the bush smelt on the walk up the hill behind the house, known as the via silica. Little fantails popped about in the lower branches, and would perch on an extended walking-stick, scolding with tiny shrillness. From the summit, where young oaks and birches had been planted, the view of "Hills beyond hills again" of the lower ranges stretched away, and, as a background to an infinity of small sounds, the great river

roared beneath its terrace. Round the house the lawns were smooth and green, set with beds of English flowers; a nut walk called to the many lovers who loved this garden, and paths wandered charmingly among limes and beeches and led into the untamed country without. Outside the garden stood the little church, built of great stones from the river-bed. "Her foundations are upon the holy hills" its builders wrote of it, and dedicated it to the Holy Innocents. On Sunday evening the family of Holnicote held the service there. One daughter rang the bell, another played the harmonium, and a son or son-in-law read the service in cassock and surplice. The household and its summer guests walked down through the garden, and from the whare (hut) on the flat the men—estate employees, shepherds, shearers, cook-hands, gardeners—came up in Sunday clothes, filling the little nave and singing lustily.

Round the mountain spur on the edge of the plain was the village, always so called, and here was another English house transplanted, its owners living a serene and leisured life under rowan trees which held their own with the flaming rata in the deep bush in the gullies above. Guests coming down early to breakfast would find the host reading *Pepys's Diary* as a preliminary to morning prayers.

Round the foothills lived a community of agriculturists and sheep owners, perfectly sufficient to itself. A son of one of the original pilgrims, whose photographs made priceless records for the settlement, lived on the last hill below Mount Fourpeaks. Backed by the mountain the house looked down the endless plains. The magpies sang wild and sweet in the wattle and blue gum plantations on the flat, and in the bush behind the garden the tui and his attendant bell-birds—the grey-green moc-a-moc—made music all day long. "I will plant fruit trees for the rest of my life if the moc-a-mocs will come and eat the fruit," said the host. Further round the mountain lived his sister, the first child born in the Canterbury settlement, whose christening had been in a pic-dish.

No section of this society changed its habits very much; the Scottish emigrants settled mostly on hills, and the Irish congregated round swamps. In one part a group from the Dufferin estate settled all together and called their place Clandeboye. These rugged North Irish were progressive and efficient, but some of the old peasants never changed—old feuds, old superstitions persisted, as the following incidents show. A north Canterbury run entertained an old Scot who lived on a tiny piece of land he had taken up in the times

of undefined boundaries. His dog developed the heinous habit of sheep-worrying and killing, and one day the run-holder, who bore a well-known name, caught him in the act. Being without his gun at the time, he managed to catch the criminal and proceeded to lead him off to execution. Presently his way was barred by the dog's master who demanded to know what he was doing with him! "Well, Sandy," replied the run-holder, "you know as well as I do that he's been killing sheep for weeks, and to be plain with you I'm going to shoot him." "Ahh-h," cried the old man, his face distorted with the hatred of generations, "I ken ye Douglas—ye're naething but a Bor-rder thief."

On a swamp road between rows of Lombardy poplars an old woman leaned upon her gate, a sun-bonnet over rough grey hair. Behind her was her T-shaped cottage painted pink, with galvanized iron roof, glaringly modern and unromantic. Neat green fields of reclaimed swamp full of prosperous cattle surrounded her. "How are you today, Kate?" asked her visitor. "I'm bad—bad it is," she answered. "See"—dropping to a hoarse whisper—"them there," indicating the next cottage in its trees. "They would put a curse on me—what did I find yesterday on my doorstep—the rotten pumpkin, split it was—and that means that the one within will rot like that pumpkin and die." Her light-grey eyes rolled wildly.

During the epidemic of 1919 voluntary workers, entering the small houses in the large towns to attend to the sick, found that some of the people had lived for years without communication with neighbours on either side, strenuously holding to the principle keep yourself to yourself.

Near the mouth of the Rangitata, which was almost the southernmost boundary of the Canterbury plains, was the House by the Sea. From there you could go no further, for the river was impassable and ran out into the Pacific Ocean which roared in upon coarse sand and shingle. The plains stretched flat as a table, yellow tussocks with fur patches of shelter trees up to the mountains. "Now, at last, I know how far the east is from the west," said one visitor when he saw the endless line eastwards from the low wall of the Hunters' Hills which flanked the outer range of the Southern Alps.

English trees did not flourish on the arid plain, but the house was surrounded by plantations of *Pinus insignis* and blue gum which, as they grew up, protected the garden from the winds which raged nor'west, sou'west, easterly in never-varying cycle. The bunga-



By courtesy of the High Commissioner for New Zealand

A flock of merino cross-bred sheep moving down from the hill country of Orari Gorge. The original owner came from Devonshire, and married a daughter of Bishop Harper. The mist is coming down from Mount Peel. Unseen, keas scream hoarsely around moving flocks

low house, brown varnished wood within, weather-boarded without, was covered with climbing roses and jessamine, and here England began again, with that pertinacity that survives the conditions of equator or Arctic circle. In the drawing-room, behind its sunblinds, was that mixed and bitter-sweet smell of chintz, summer flowers, old lavender and piano-case that brings such peace to an outdoor worker weary with glare. The eldest daughter, frail and strenuous, patterned unknowingly upon the English aunts she had never seen, pursued intruding sunbeams with newspapers, the sun being strong enough to fade pale patches on the treasured English carpet. The house had been contrived by pulling two inadequate pieces together and building a hall in between when the sudden turn of an election had driven this political family into the only exile available. They had sacrificed personal prosperity to Demos, and, as is his custom, Demos had turned upon those who idealized him. "Though he slay me, yet will I trust in him" must be said in the heart of every upright man who sets out to serve the people. And he will be slain—but such is the balance of the mind of Demos that he frequently raises a monument to his victims. Though suspicious, he does not forget past benefits.

Human contacts were rare, for the nearest neighbour was twelve miles away, and in the absence of active local politics, the English

papers and affairs were some solace to the isolated women folk.

Confidence in the policy which led up to the South African War, a very restrained attitude to the rising Liberalism that succeeded it, a firm anchorage in the views of Arthur Balfour, constituted the feminine politics of the house. What the Master thought in those days, no one knew very much; he said little, but when he had faded out at the three-score years and ten of the Psalmist, with whose phraseology he was saturated, there remained with the people who had rejected him a legend of uprightness that grew, rather than diminished, with years.

Uprightness, frugality, self-abnegation, restraint in word and deed, those of us brought up in that school of thought which founded this settlement speak thankfully of it one to another in far-distant meeting-places as life drives us to and fro. A standard that did not fail when beset.

And in the Pass of Thermopylæ, on the shattered beaches of Crete, in the supreme trials of the desert and of Cassino, still another generation has maintained that standard. Speaking a truncated version of the classical periods of their grandfathers, wiry, tough, self-conscious, independent, in their hearts is hidden the supreme pride which was voiced by one of the second generation: "I belong to a country where we consider ourselves more English than the English."



Climbing in the Taurus Mountains

by ROBIN HODGKIN

THE Taurus 'Express' was crowded as it wound its way through the blue Amanus Mountains of the border regions between Syria and Turkey. Entering Turkey for a holiday had been easier than I had expected. My papers were found in order and my status as a tourist was not questioned. Securely wedged between a large matron in black and the corner of the carriage, I was able to enjoy the landscape of receding ridges and narrowing plains of this frontier zone.

Quite suddenly I found that Arabic and French ceased to be of use to me. Clothes changed too. Oriental robes and turbans were left behind, and the peasants by the irrigation channels wore European clothes. The character of this marchland, however, is more fundamental than mere clothes and language. For thousands of years these hill ranges and the Taurus to the north have acted as breakwaters which stemmed the tides of Semitic peoples, from Assyrians to Arabs, that flooded

northwards to wash over, but never engulf, the Anatolian tablelands. Ideas and creeds might flow northwards, Christianity and Islam, but the peoples who nourished them flowed back from the alien highlands to dustier southern plains. As we slipped westwards towards the Cilician plain the landscape had little to say of such dramatic changes, for the chief barrier was still ahead of us: during the night the train would struggle up the steep flanks of the Taurus Mountains and plunge through their stupendous gorges.

Last but not least of the contrasts of this journey was the transition from countries at war to one at peace. It was not the most tranquil kind of peace. Sitting on a fence is never restful, especially if the fence is of barbed wire. The studied impartiality of the newspapers and the bright lights of the towns were self-consciously neutral; but the number of stolid grey soldiers who lined the corridors

and platforms was a reminder that war was not far off.

The train was running late so I was able in the early dawn to get a fine view of the Çakıt Su, an extraordinary limestone cleft which the line follows through the Taurus. This was the most difficult section of the Berlin-Baghdad railway and was built during the last war. It was certainly a bold and brilliant piece of engineering. A vertical chasm, formerly impassable, cuts through the mountains just east of the historic Cilician Gate. The gradients, however, are so steep as to make it of much less use to Turkey than might have been expected. Trains have to be short and double headed for the ascent. During the descent, in order to check possible sporting impulses in the drivers, it is compulsory for all trains to stop completely at one steep point half-way down. In order to ensure that this is done, the driver must get out of his cab and punch a clock on a telegraph pole. The later stages of the ascent become less dramatic until the train finally makes its way out onto the rolling plain of Anatolia and the passenger can look back on the mountain chain he has passed through.

It was early in June and the peaks were still lined with plentiful snow. Their serrated outline and the silver whiteness of their corries made it hard to believe they were not a fully glaciated chain. They looked for all the world like some minor Alpine range, a promise which they justified when we returned to them two weeks later. Meanwhile I was going to Ankara to meet a friend, E. H. Peck, who speaks Turkish fluently and had already visited the Taurus. We planned to go to the north-eastern section of the range, properly known as the Ala Dağ, which though very little visited by mountaineers promised some fine climbing.

I spent about a week in Ankara and another

The small black square marked on the map below shows the area covered by the more detailed map of the author's journey on the right



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near Istanbul before returning to the mountains.

We left the West behind us as we walked over a noble stone bridge across the stream above Pozanti. This little village in the heart of the Taurus lies on the railway above the gorge and below the last long climb to the plateau. Forty-five minutes away by car are the Cilician Gates themselves. Unlike many passes called 'gates', these look the part. Two grey limestone buttresses frame a narrow passage through which the ancient route passes. On the rock wall a Greek inscription can still be seen and coins of Alexander's day are still turned up by roadmenders. Our route over the bridge was the ancient continuation of this road which formerly ran along the foot of the Ala Dağ north-eastwards towards Caesarea Maxaca (modern Kayseri), but it has now lost its importance to the railway route and the attendant road which cuts away in a north-westerly direction.

We were a small party, two well-laden ponies and their owners, a servant and three climbers. Our destination was Emli, a hamlet about thirty miles away, lying at a height of 5000-6000 feet on the slopes of the Ala Dağ whose main summits are about 12,000 feet high. The path wound up through scattered pine trees and over green spurs splashed with blue cornflowers and mauve vetch. Every few miles there was a stone drinking-fountain, but many were dry and derelict, serving only to remind us of the great days the route had once enjoyed and of the great men who had gone this way before: Xenophon, Alexander,



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(Above) *Characteristic farmstead in Anatolia.* (Below) *The noble single-span bridge across the Çakit Su, an extraordinary limestone cleft, which runs through the Taurus Mountains*





(Above) *The old Khan or fortified rest-house, now used as a farm, at the head of the Emli Valley. The canyon mentioned in the article can be seen: its edge appears beyond the near-by slopes. (Below) Romali Hissar (Hissar means castle). Two such castles were built by Mohammed the Conqueror, Sultan of Turkey, for his final assault on Constantinople in 1453*

St Paul among them; but now the valleys were empty save for an occasional high-walled farmhouse and its attendant cluster of poplars.

On the evening of the second day we wearily approached the little hollow in which Emli lay concealed. One comes on it suddenly; the only warnings are a few brown fields like patches on the swelling green, a few poplars like spears beyond and, when one gets nearer, the pleasant sound of a stream. In this dry limestone country, though greenery is plentiful and trees not uncommon, running water is a rarity except in the main valleys. At Emli an underground stream gushes to the surface and is led along the hillside to irrigate the fields. These and the surrounding hill pastures supply a living to the half-dozen families of the hamlet. At some time during the first centuries A.D. a shrine was built over the mouth of the stream. It still stands there, a half tumble-down temple with a rude altar and part of its roof intact and the stream still flowing through it to the door. Though whatever god of water or fertility once reigned there is now forgotten, the roof is still sound





enough to keep out the rain in one half, and ruined enough to let out the smoke in the other, and it made an ideal base for our expeditions of the next ten days.

Our first aim was to climb the peak of Demirkazik, a high isolated parabola of rock which had been conspicuous from the train in my first view of the mountains, and which Peck had visited the previous year. We knew nothing about the climbing on it except that it looked steep and that it had probably been climbed by some former German expedition. We left the shrine before dawn next morning and made our way over some swelling downs for two hours and then scrambled into a grassy corrie at the base of the peak. It rose up ahead of us, 6000 feet of it, scree at first and then steepening into countless rocky but-

tresses seamed with snowy gullies. The scree was straightforward but very hot and we were glad to get to the cooler but more intricate business of kicking steps up the branching pattern of snow gullies. By lunch-time we had reached a notch on the main ridge with an awe-inspiring drop down the north face ahead of us, an unclimbable tower on one side and a rather steep bit of climbing on the other towards the summit.

The next four hundred feet were the most difficult but the most enjoyable part of the climb. We wormed our way up a little black waterfall and then up some steep grey slabs beyond. It was fine climbing, airy and unknown, with a steadily increasing panorama revealing itself all round; a pleasant change after the arduous, confining gullies below.

A modern 'son of the farm' (extreme left) wears a political party badge and is smartly dressed.

An old man (left) still wearing the fashions of yesterday. He and the little girl (right) live in a small community of refugee Turks transplanted to Anatolia from Greece



We reached the summit, unearthed a battered swastika flag left there five years before and replaced it with a staid calling card. We had now been going for ten hours so we lounged about a bit to take in the view and rest.

All the peaks of the Ala Dağ were stretched out around us. It was only now that we realized how many other grand peaks there were hidden in the recesses of the range. We could only guess at the names of one or two marked vaguely on our map, but we became firmly determined to spend as much of our time as possible in exploring and climbing as many of them as we could during the rest of our stay. Our descent was retarded by the suddenness of my boots. A long and chequered career in the Balkans with Peck had aged them, and they failed to stand up to

the long glissades and scree runs of the descent. We hobbled back to the shrine in the darkness after being on the move for nearly seventeen hours. Great quantities of milk, both fresh and sour, a fire and the soothing murmur of our stream were like balm to our tired spirits, and we soon fell sound asleep.

The most interesting country had appeared to lie up the main Emli valley. This consisted of an ordinary steep-sided mountain valley which continued into the outer flanks of the range in the form of a canyon. This canyon was a strange place which we came to know quite well during our comings and goings of the next week. One dropped into it suddenly by a craggy path descending from the smooth grassy slopes on either side. There was plenty of grass on its flat bottom



(Above) Ludut Dağ which proved easier to climb than other big peaks of the Ala Dağ range. From its summit a view which revealed the general layout of the range was obtained. (Below) The author's party descending one of the steep paths into a valley





Photographs by the Author

(Above) A two-headed virgin peak climbed by the author and christened Iki Dağ. From its top he picked his route up to Ludut Dağ, the highest peak of the range. (Below, left) The "high flowery camp" and some of the party resting; (right) climbing a steep limestone slope



but no water. For this reason there were very few sheep, but every now and then we came on a shaggy camel. The walls of the canyon were vertical russet-coloured rock with many caves undercutting their bases. Some of these were obviously man-made or man-improved with a square-cut entrance and a 'bench' carved in the rock within. Whether they were tombs or dwellings and who made them we could not guess, but they were probably much older than the shrine and the relatively sophisticated culture which it implied. There was a curious 'lost world' feeling about this place, so cut-off and so different from the friendly pastures and familiar peaks outside.

We spent three nights in a high flowery camp and climbed two good peaks to the south of the Emli Canyon and then decided to go right up to the head of the valley itself and tackle Kaldi Dağ, the highest peak of the range which lay somewhere in that direction. When I spoke of 'exploring' these valleys, this should not be taken to mean that we were in quite unknown territory. The small-scale Turkish maps marked them and some of the peaks round about, but their information was often inaccurate, especially in the higher parts which we were making for. One fairly large German expedition and two small ones had been in the region, but we had seen none of their reports, which Peck later unearthed, and even if we had, the nomenclature which they used would have done more to confuse than to enlighten us.

Nevertheless, for us the valley was full of secrets. As we rounded a spur or topped a rise we always hoped to catch a glimpse of the high rock towers of Kaldi Dağ; not only was it our goal, but such a big feature (over 12,000 feet) would help to straighten out our mental maps. But we never spotted it and we puffed up the last scree and grass below the snow-line still wondering what would be found beyond our camp site round the next corner. We unloaded our now solitary horse which had gradually acquired the appearance of a porcupine as we had piled assorted firewood on its back throughout the day, and then got down to the business of converting an obstinate snow-patch into a water supply.

Next morning we left camp with the first light of dawn. Ahead of us there would be some 4000 feet of climbing on a mountain face we had never set eyes on, so it was with some excitement that we made our way over snow and rock into the steep-walled corrie round the corner. What we found was well up to expectation. The corrie itself was a great horse-shoe of steep red limestone seamed

with snow and edged with jagged peaks. Its floor was a mass of snow and tumbled moraine. Kaldi Dağ itself rose in two splendid orange towers from the western rim. It would obviously be a fine climb . . . plenty of steep snow to start with and plenty of steep rock-climbing above. An unknown route and perhaps an untrodden summit to crown it. With such a prospect in mind we made light work of the thousand and one steps which had to be kicked before we reached the rim of the corrie and the main shoulder of our peak.

The sun had just risen and the peaks around us had turned to red. From our shoulder we could look south and eastwards, down across wooded slopes to rolling blue foot-hills, to the misty plains of Cilicia, and in the far distance we could just distinguish the Gulf of Iskanderun and the dim Amanus Mountains beyond. After a short meal we roped up and started cutting steps across the last and steepest snow towards a promising gully which cleft the main rock mass in two. The climbing on the final pyramid was steep and sometimes tricky. Loose rock abounded and the leader was always liable to dislodge something onto the head of the man below. But at heart the mountain was sound; underneath the missiles was good firm rock and we climbed discriminatingly up a series of chimneys and awkwardly shelving rock-tiers towards the top. After three hours of such progress we scrambled up onto the summit where swirls of mist were beginning to obscure the view. We found a cairn which the Germans had left five years before and a note in which they claimed the second ascent. This slight disappointment had been half expected and we consoled ourselves with pear-drops and the pleasant feelings which remain after a grand morning's climbing.

The descent went smoothly; more than smoothly when we got onto the snow slopes and embarked on a long thousand-foot glissade to the corrie. This climb was not quite the end of our stay. We explored another ridge which helped us to understand the country better and made an abortive but interesting attempt on one other large mountain. We then returned once more to feasts of yaghort and cherries at the shrine. More cherries and a comic-opera shave at the nearest village. Here our sudden arrival set suspicious Turkish officials, and their telegraph lines, humming. Then we walked northwards for two lovely but rather lengthy marches; and the panorama of the Ala Dağ dipped gracefully, rose and dipped again behind the rolling sky-lines of Anatolia.

A Coronation in Manipur

His Highness Bodh Chandra Singh, Maharaja of Manipur—the small Indian State lying between Assam and Burma—succeeded his father in September 1941. But owing to the war and the battles fought in his territory his coronation had to be postponed until last December when conditions became more normal and the omens could be declared by the palace astrologers and the pundits to be auspicious.

The ceremony was a religious one and followed Manipuri tradition. It started with a procession which left the royal palace at noon, with the Maharaja mounted on an elephant. In front of him went the heralds, wrestlers with spears (right), dancers, standard-bearers and guards. Below are the musicians tightening up their strings



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(Left) The court herald, with his conch shells, announcing the progress of the procession. (Above) Villagers from all corners of Manipur bring gifts to their Maharaja. (Opposite) The Prime Minister being dressed for his part in the coronation ceremonies. No women attended with the exception of the soothsayers





Decking the Maharaja's patient state elephant with ornamental Benares draperies, cloth of gold and fabric inlaid with glass and silver wire



Led by white-robed Mahouts the Maharaja of Manipur moves in formal procession to the coronation hall

(Opposite) The Maharaja, gorgeously appparelled, mounting his elephant for the procession. After the three hours' ceremony which included the propitiation of a mythical serpent ancestor, reading from sacred books and the performance of sacred dances, the Maharaja returned to the Palace to perform traditional purification rites. The day ended with the entertainment of Manipuris and of British and Indian troops, and with feasting, wrestling and dancing



Camping in Kashmir

by R. C. AND N. C. McWATTERS

A HOLIDAY in Kashmir in normal times offers a choice of pleasures. One can stay in a comfortable hotel in Srinagar with dancing and tennis or hire a hut by a famous golf links; one can live in a house-boat on the lakes and rivers or take to tents, with all Kashmir to wander in.

Having chosen the last, we visited one of the many agents who supply camp kit and

servants, and hired tents, camp furniture, cooking pots, and leather-covered chests called yakkdams made to fit onto the pack-saddles of yak or pony. In the valleys supplies are easy to get, for in every village meat, fowls, eggs and milk can be bought, and only a small box of 'Europe stores' is needed to give variety. In the East every traveller has his own bedding rolled up in a waterproof valise, and one of these hung on each side of a pony makes a convenient load.

Thus provided, we began with a short trip into one of the lower valleys to try out our equipment before going further afield. As something resembling a road was available we chartered a bus to take us, our servants and a couple of protesting chickens to our first camp. The bus smelt of fish, the doors were tied up with rope, and the seats were hard wooden benches, but though most of the paint had peeled off, one could still decipher "THE DE LUXE MOTOR SERVICE" upon its side.

The road lay at first down a long avenue of poplars, with masses of blue irises on either side and a distant view of snows, past many timbered villages and a thousand-year-old temple. There followed a rough track over which we bumped for miles till at last it petered out at our first camping place in a secluded valley. The site had all the requirements for a good camp: its own spring close by, a shady grove, and an open stretch of grass which had not been spoiled by recent occupation. It was too early to move into the higher valleys, which were still under snow, so we settled down there for two or three weeks.

Thick grass matting, made in the nearest village, provided flooring for the tents, mattresses for the servants and a shelter from the sun over our table and chairs in front of the tents. Our servants included the bearer, who performed the duties of house-parlourman, a cook who collected local supplies and could turn out a first-rate dinner with the most rudimentary equipment, and the sweeper, who was responsible for the sanitation of the camp.

We filled the weeks very pleasantly exploring the side valleys, fishing, and studying the life of the valley. A brilliant blue-and-orange kingfisher hunted in the stream beside us, a paradise flycatcher was our near neighbour,





The famous gardens of Kashmir made by the Moghul Emperors attract many visitors: (opposite) the Moghul garden at Achhibal. (Above) House-boats on the Dal Lake Srinagar in which Europeans often live during the summer



A shawl merchant on his round among the house-boats. The Hindu temple in the background shines like silver—it is covered with kerosene tins!



*The main roads in Kashmir
are lined with poplars*

*A Kashmiri brings home willow leaves
for his cattle to eat. To make a con-
venient load, grass or other fodder is
tied to a rack made of two parallel poles*





A group of little girls takes an interest in the authors' camping party. There are many village schools in Kashmir, where such children learn to write and speak Urdu as well as their native Kashmiri. (Opposite) The camp moving off. The tents have been rolled into convenient bundles and the ponies' pack saddles are ready to be loaded up

and a woodcock shepherded her brood in the wood near by. If we stirred she would make them stand motionless, when their camouflage made them indistinguishable from the fallen leaves, while she flew off to distract our attention. One day the road was thronged with villagers who had been down to get silkworm eggs, tested in the State laboratories, for there are many mulberry trees in their valley and the silk trade is one of the principal industries of Kashmir.

When it was time for us to move, a message to the headman of the village produced a score of ponies from which to choose. Some were untrained, some had mouths of iron or saddle sores on their backs. There was much quarrelling among the men, who were eager

to point out the defects of each other's ponies; but we soon found the necessary baggage ponies and fair mounts for ourselves. The first start was turmoil and confusion, pony men and servants getting in each other's way. There were squabbles for the lightest loads in which the bearer arbitrated, with right of appeal to 'the sahib'. But in two or three days each had his allotted task, and the breaking and pitching of camp went like clockwork. Loads were made up during breakfast, a picnic lunch was given to a coolie to carry, and all was loaded up a few minutes after we had left the camp.

We set out to cross a range 3000 feet above the head of the valley through a pine forest, and from the crest looked down on the great

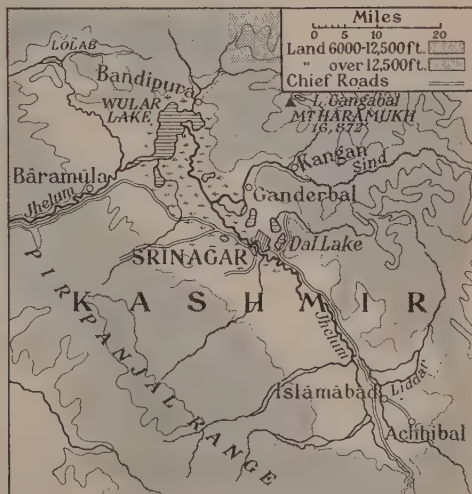


Wular Lake and the central plain of Kashmir, with the Jhelum River winding through it like a silver thread. The surrounding mountains were in places lost in cloud, but in others they stood out brilliantly clear and white in the sun. In that clear air peaks a hundred miles away were seen as distinctly as the nearest. The climb had been hot and tiring, by a rough track too steep to ride up, but at the top we were delighted to find a bank of the painted tulips which Baber, the first of the Moghuls, mentions in his memoirs, when in his flight from his lost kingdom of Ferghana he found time to halt and enjoy their beauty.

A long descent led to a camp by a lake full of lotuses, and the next day's march, through orchards of scarlet-flowered pomegranates, ended at the mouth of the Sind valley. We camped at Ganderbal, on the edge of the central plain among terraced rice fields, flooded with water which reflected the snows and the poplars that surround every village.

Our next few marches were up a forested valley which narrowed to a precipitous gorge, the upper end almost blocked by avalanches from the cliffs above. Finally we reached the grassy 'mergs' or alpine meadows above the

tree belt, where we camped at the mouth of another valley. We were now at over 11,000 feet and nights were really cold, so that we were glad to spend our evenings by a roaring camp-fire, looking up at a series of moonlit rocky peaks above us, with five glaciers



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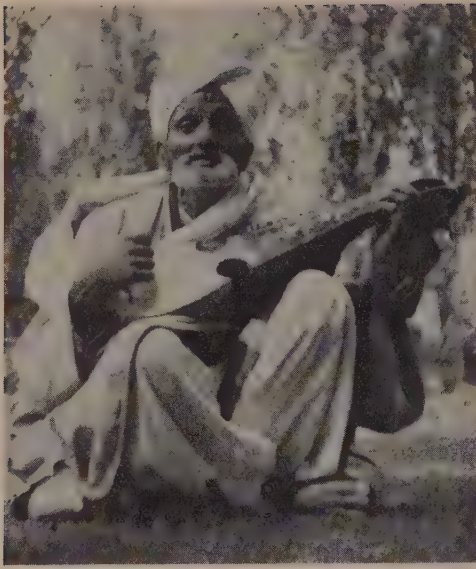
(Opposite) Two views of the rice fields near Ganderbal. The Pir Panjal Range in the background of the upper picture is fifty miles away. In the lower picture the cloud is hovering over the Sind River, up which lies the route to Ladak. (Above) Looking down on Lake Gangabal; above towers Mount Haramukh, lost in the clouds. (Left) In the Lolab Valley. The camp cook turns out an excellent three-course dinner with the most rudimentary equipment



The authors' party camping in the Lolab Valley. On the left are the servants' tent and the cook-tent



*Looking south across the Lolab Valley toward the Pir Panjal Range
which forms the southern limit of the Kashmir valley*



descending to the snows which still covered most of the valley.

On the march up from Ganderbal camps were sometimes pitched on a grassy knoll just above the river, sometimes in a glade among the trees, always amidst a profusion of flowers. A settled routine was soon established. On arrival the first care was the choice of a site with a safe water supply, then a short rest after the march and an hour with rod, gun or camera while we waited for the baggage to arrive and for camp to be pitched. There were three tents, one for the servants, and a tiny one to serve as kitchen. Our own tent was but 7 feet square, with an inner and an outer fly to give better protection against sun and rain; a space between the two at the back served as bathroom. When the servants arrived it was not long before they had two kerosene tins full of hot water with which to fill the canvas bath.

The dinner-table was generally set outside the tent on a Kashmir rug, and two candle lamps with pink shades gave an air of gaiety.



A Kashmiri musician, seated in a glade among the trees and flowers, entertains visitors with native airs and songs. (Left) A more rugged landscape: in the mouth of the Valley of Glaciers near the head of the Sind valley

Still waters and snow-capped mountains: looking across the Jhelum River in early spring. One of the many characteristic Kashmir landscapes that made the authors' camping holiday memorable

Every day was spent in invigorating mountain air, and ended with a happy combination of physical fatigue and mental contentment. What more could holiday seekers ask?

The next two months were spent in a journey into Ladak, and on our return to this camp in the valley of glaciers snows had melted and new routes were open. So we started on a journey of a different kind, above villages or even shepherds' huts, over paths rarely used. All supplies, even fuel, had to be taken with us and personal luggage cut to a minimum. The route was barely possible to ponies and in places the baggage had to be unloaded and carried by hand. But the discomforts of the road were forgotten at the top of a pass when we caught a glimpse of Nanga Parbat. This mountain is 26,000 feet high and is the more striking in that it towers alone, 10,000 feet above any of its neighbours. Nearly always it is wrapped in mists, and we were fortunate to catch one of the moments when these parted to reveal its delicate beauty. It is to these sudden disclosures that

it owes its name, which means "The virgin unveiled".

The road passes several high glacier-fed lakes of a remarkable turquoise blue in colour. Beside these we pitched our camp. One of them we visited not only for its beauty but for specimens of a rare mayfly reported from only two places in the world, here at Lake Gangabal, and curiously enough at the opposite side of the world, in the Rocky Mountains. A few miles from the lake we walked into a cloud of them in the midst of their nuptial dance, but before we could unload our collectors' kit a sudden storm had blown them all away. Happily we succeeded in finding a few which had fallen into the water, as well as some of the larvae previously unknown.

Next day we met a lone traveller upon the road who brought news from the outer world; ominous news of events in Europe, which sent us hurrying back to Srinagar, where we arrived the day war was declared. We had left a land of dreams for one of grim reality.

Photographs by the Author



Outpost in the Azores

I. Terceira and Its People

by PETER HUTCHISON

The ancient Portuguese Treaty of Alliance with England received a dramatic application when, in October 1943, the Portuguese Government granted us the right to use the Azores as air and naval bases for the protection of merchant shipping. Since then, the islands have had a R.A.F. garrison which has brought them into an especially intimate relationship with our own more northerly Atlantic islands; in the following two articles Mr Peter Hutchison describes the natural and historical background against which Flight-Lieutenant David Beaty's sketch of R.A.F. daily life is set

THE island of Terceira, on which a large part of the British Force in the Azores is now stationed, obtained its name from the Portuguese word meaning 'third', because it was the third to be colonized in the group of nine inhabited islands which make up the Azores archipelago. This took place during the 15th century, the hey-day of Portugal's greatness as a colonial power. It will be remembered that Columbus set out to discover the American continent in 1492, but the Portuguese claim that their voyagers had forestalled him by several years and point to the fact that Joao Vaz Cortereal in 1474 received half of Terceira island as a reward for his alleged voyage to Newfoundland. Vasco da Gama called at Terceira on his return from his first voyage to India, and during the 16th century

the island was used as a fresh-water supply point to vessels on their way to the Orient. During the sixty years of Spanish occupation, Terceira was a bulwark of Philip II of Spain against the British sea rovers. Convoys used to assemble at the port of Angra, a town which later earned the right to add "do Heroismo" to its name owing to the heroic fighting of its troops in the Portuguese civil war of 1828.

By about 1834 the oppressive feudalism of the land-owning class had come to an end, so when the British Force arrived in Terceira in 1943 they found an island of peasant proprietors tilling their small plots of land in primitive simplicity. The principal impression from the sea, or from the higher slopes of the volcanic mountains which form the hinterland, is one of a vivid green landscape,



Praia da Vittoria is built where a plain of volcanic ash slopes down to a wide sandy bay

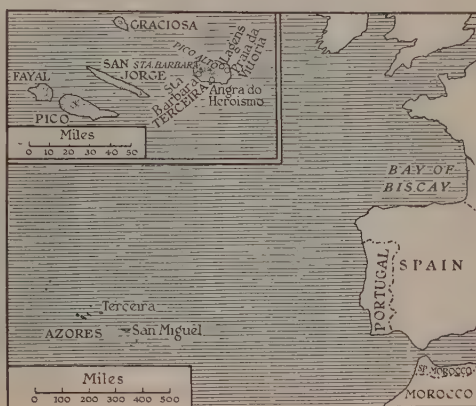
due to the mild climate and high humidity of the atmosphere, with small white buildings dotted about and strung along the few roads; a kind of agricultural ribbon development. The villages are frequently oblong in shape and nearly touching one another, as opposed to the relative compactness of the traditional English village. This closeness of the dwelling-houses is partly caused by the fact that, although the greater part of the island is cultivated or used for grazing or forestry, there are practically no inhabited buildings to be found at a greater altitude than about 1300 feet, owing to the cloud which at certain seasons of the year is almost perpetual over a great part of the island above this level.

Terceira is about twenty miles long by eleven wide. It has a population of about 60,000, of whom 13,000 live in the chief town of Angra do Heroismo. Like all the Azoreans they are of mixed Flemish and Portuguese descent, with a dash of Moorish blood, but for centuries Portuguese has been the only language spoken in the islands.

There are two mountain masses, the higher one to the west being dominated by the extinct volcano of Santa Barbara (3356 feet). No coal or other minerals of commercial value are to be found in the island, a factor which causes even old tins to assume a value among the poor which is quite unknown in England. Cutting them up and converting them into mugs or similar articles of household utility is a minor local trade. In fact

good specimens of the tin containers of certain brands of tobacco and cigarettes are readily exchangeable for eggs, a situation which members of the British Force speedily turned to their advantage.

The making of fine embroidery, which employs women and girls in their own homes, is the only industry of any size on the island, and the bulk of the population is engaged in agriculture or fishing. The holdings themselves are divided into small fields, each bounded by loosely constructed stone walls. Husbandry is extremely primitive, the land being tilled with a cumbersome wooden plough or harrow drawn by oxen. Though chicory, beans, sweet potatoes and vines are



Stanford, London



The glistening white buildings on the sea front at Praia, a small fishing town and pleasure resort



Streets in Angra do Heroísmo are narrow. The cart in the foreground is heaped with bananas

grown, maize is the principal crop. It is threshed by the 'mangual' or 'trilho' which slides along the threshing floor over the ears, drawn by oxen. Oxen are in common use as draught animals and the ancient ox-cart, heavy and slow, similar to the old Roman chariot, circulates everywhere.

The island is noted for its cattle-breeding. There are both private pasture-land and large uncultivated stretches for common use. Only draught animals are kept under cover during the winter. The dairy cows remain at pasture where the cowherds go at dawn to milk them, often far up in the mountains.

The two main occupations, fishing and agriculture, are sharply differentiated. The fisher-folk live in separate quarters in the villages and have their own primitive festivals. Saint Peter Gonçalves and Our Lady of Boa Viagem are their patron saints. Like the farmers, their methods are primitive, and both in fishing from boats and from the rocks along-shore they frequently use a bamboo pole with a line or wire.

The population, which is of the Roman Catholic faith, tends to increase to the point of pressing severely on the means of subsistence. Until recent years this increase was checked by considerable annual emigration to the United States and Brazil, but the restriction in the American immigrant quota and the coming of the war has almost completely shut off these outlets.

Wages and the scale of living are both very low-compared with British standards. The main diet of the peasants consists in soup made of cabbages, beans and potatoes, with maize-bread, fish, cheese and milk. Meat is eaten but rarely.

The houses are usually whitewashed buildings of one storey, in appearance reminiscent of parts of South and West Ireland. They have two to three rooms, a stone trough where the bread is kneaded, and an open hearth leading to a bread oven and chimney outside the walls. This outside chimney, of a curious tapering and triangular shape in its upper part, is a distinctive feature of the



Farm equipment and methods in the Azores are still primitive. The ox cart is almost the same in design as the Roman chariots of old

houses in the Azores. The outside door opens directly into the main room which is sparsely decorated with devout pictures, some knick-knacks, earthenware vases for flowers, and an oratory above a chest-of-drawers. In the front of the house there is usually a small garden and a narrow strip of land between walls, known as a *rua da casa*, where animals are kept. An erection of three or four poles round which ears of maize are stacked, uncovered, is also a prominent feature of rural dwellings. A pig-sty, and sometimes a fig tree or pergola thatched with vines, are frequently to be found in slightly better-off homesteads.

The working clothes of the peasants are a further reflection of their poverty. The men wear coats and trousers showing many patches. Frequently they are barefooted or have wooden shoes; the women wear wooden shoes or slippers.

Owing to the high degree of illiteracy, and the almost complete absence of privately owned wireless sets in the island, it seems

probable that at any rate until the arrival of the British Forces the population were too pre-occupied with the struggle for existence to take interest in the progress of the war. It is in fact the soil and the religious calendar which dominate their lives. The months and the seasons of the year are designated according to the saints. January is dedicated to the Epiphany and is called the month of Kings; February is the month of Calends. An inhabitant will say that he will marry "by the Holy Ghost" or "by the Child Jesus"; after the harvest or at the grape-picking.

Though the struggle for existence is the main preoccupation of the people, there are other influences, of a subtler yet more profound kind, which have shaped the character and outlook of the Azoreans. The extreme insularity of the archipelago, owing to the vast ocean all round, causes a kind of escapism from what has been described as "the sad loneliness" of the inhabitants, and it is significant that spontaneous singing, or music of any kind, is practically never heard among



All photographs from the Author

In the villages, whitewashed houses, with red pantiled roofs, show up well against dark green vegetation

the islanders. The type of scenery and the prevailing climate have also contributed to this sadness. In the words of a recent Portuguese writer, "the mist, the green colour of the fields and hills, the light filtering through the clouds, the volcanic aspect of the soil and grey stone walls, the sound of the waves, give the landscape of the Azores a note of melancholy which it never loses". It has worked on the character and temperament of the people, making them slightly melancholy and suspicious, slow in speech and gesture.

A further influence on their emotional outlook is to be found in the volcanic origin of the islands. Within historical times there has been volcanic activity, and this uncertainty of nature and landscape, working on a primitive and religious people, seems to have implanted in them an acute realization of the impermanence of earthly things. The early

colonizers, feeling their dependence on what they could not dominate, seem to have taken refuge in a kind of religious mysticism which came to regard earthquakes as a form of divine punishment, and even today the idea of an avenging God predominates over that of a merciful one.

An inherent fatalism, combined with the influence of a mild and humid climate, does little to encourage enterprise or receptivity to new ideas among the bulk of the population. This fact is fully recognized by some of the leading men of the island who are trying to introduce from abroad new methods in agriculture. The Agricultural Adviser to the local authority in Terceira took a course in dairy farming at Reading University and a model farm has been started to demonstrate improved methods of milk and butter production. But progress is necessarily slow among the conservative and largely illiterate population. However, tribute must be paid to the adaptability to modern machinery and capacity for hard work

shown by the labourers both in unloading ships and in carrying out many different kinds of constructional work which followed upon the arrival of the British Force.

An endearing characteristic of the islanders is an innate courtesy, often found in a peasant people working in close touch with the soil. When one comes across labourers going about their daily business they acknowledge one's presence by removing their hats in a grave and dignified manner which is delightful to meet. Living their lives in isolation, long removed from modern influences, there still seems to cling to them many of the attributes of a simpler pastoral age. Indeed the faces of the older people often show a curious spirituality which is strikingly like the faces found in a Van Eyck or Mabuse painting—perhaps a survival of their Flemish ancestry.

The women sometimes help on the land; more often they confine themselves to household duties. The family is held in high regard and children live with their parents until marriage, giving them all their wages. In the villages of Terceira a custom known as *Justica da Noite* still exists. If any man is known to be living with a woman not his wife, or in similar way causing public scandal, the other men of the village call on the miscreant at night, armed with sticks and with masks on their faces, and drive him from the community. The "wailing of the dead", similar to the Irish Wakes, is another custom which still persists.

In 1810 a Captain Thomas Addison of the Light Dragoons visited the islands. Impressed with their strategic possibilities in connection with the wars with France and

colonial expansion, he wrote a number of letters, afterwards published in book form, to a friend of his who was a Member of Parliament; in them he advocated a British military occupation by arrangement with the Portuguese Government. By a curious coincidence Captain Addison selected Terceira as being the island best "adapted for the discipline and subsistence of troops". He makes a number of interesting observations on the inhabitants and pays a fine tribute to their hospitality, which is "neither a matter of policy nor convenience but springs, like all their qualities, directly from the heart". Members of the British Force in the Azores today, who have grown to regard these simple friendly people with affection and respect, would warmly re-echo the Captain's verdict.

II. Terceira against the U-Boats

by DAVID BEATY

A great oyster-coloured cumulus cloud was covering the Azores when I first saw Terceira from the air. As we came closer, I could see small square fields, and stone walls, and the vivid green of the grass. We made a right-hand circuit of the aerodrome round the sea-coast, and were soon on the ground with the engines throttled right back, clanking along the long steel runway. A mountain started on the west side of the aerodrome, and on the lower ridges small, very white houses clustered round a church; but the heights of Pico Alto were covered in cloud. The Squadron we were joining had been in the Azores for some time flying the white painted Fortresses that fitted so well in the colour scheme of the surrounding village of I.agens.

A few buildings had been built already on the aerodrome when Portugal had granted Britain the right to operate from the Azores. The Officers' Mess, a well-built white stone building with a high roof, had been designed as the living quarters of sergeants of the Portuguese Air Force, but most people ate and slept and lived in the neat rows of tents underneath the hill. A cinema built out of an old grey barn gave two shows a day of the very latest films, sometimes before they reached England.

Life in the Azores is very regular for members of the R.A.F. It usually begins at seven, when our Portuguese batman, "Danny", shows up in an old khaki shirt and some very smart calfskin shoes which are his pride and joy. He usually gives us a weather report, "*Muito shuvás*" (much rain) or "*Muito sol*". Danny's wife does all our washing, as much as you like to send for five *escudos* (a shilling); he brings us eggs, and bananas, oranges, pineapples and bottles of Madeira. We are always well stocked with fruit. Apart from this trading and infrequent attempts at valeting (in which he really has very little interest), Danny does his best to teach us Portuguese. The surest way of making him split with laughter is to pronounce the mute 'o' at the end of a Portuguese word and say 'Obrigadoo' for thank-you. Breakfast is usually very good, oranges and eggs and marmalade, but the best thing is the new white bread and the unending supply of real farm butter.

After breakfast we go across to flights, where the ground crew have already refuelled and done complete inspections of the aircraft. These men used to work long hours in all types of weather patching and repairing the Fortresses, hampered by lack of tools,

spares and hangar space. Unlike the ground crew of fighter or bomber squadrons—who see quick returns for the work they put in when their aircraft always come home without their bombs, or with their ammunition shot away at the enemy—these boys have little encouragement as day after day the Fortresses bring back their depth charges. Nevertheless, they maintained a high standard of serviceability in the squadron.

At the flight office there would be lectures on wireless procedure, or gunnery, or first-aid in the air. Maybe there was some training flying to be done; for training goes on all the time, no matter what the experience of the crews may be—the eternal low-level bombing practice (rather fun this, pushing the aircraft down to a steep turn in a dive, flattening out and releasing the bombs by eye, not unlike a fantastic game of high-speed darts). When the gunners are on target practice, the .5's chatter into the sea whipping up small circles of froth, or the red tracer bounces on the water and soars into the air again. The crew become a little stale if training is carried on day after day without a break, and I used to organize at the end of some practice a strictly off-the-record round-the-island tour of Terceira. We follow the coastline round the

sixty-odd miles that will bring us back to the aerodrome again, watching the tiny white villages dotted along the roads, the volcanic sugar-loaf mountains, the fields and ridges of green, and Pico Alto overshadowing everything. We cruise round by a lighthouse or two, perched on the cliff sides, by red-roofed inns and white-spired churches. San Jorge, another island in the archipelago, can be seen ahead of us, its cliffs rising sheer to three thousand feet. Pico's enormous seven-thousand-foot volcano can just be seen to the south. Rounding the island, we come to the capital, Angra do Heroismo, with a large caved-in volcano a natural fort overlooking its harbour. There are a few fishermen out in their tiny boats. They wave to us as we pass them and then the aerodrome appears again, and it is time we landed for lunch.

Lunch isn't usually very exciting; stew and prunes and goat's cheese; and after it most people lie down on their beds and doze or read American magazines. The more energetic collect a baseball and throw it to one another. At a quarter to two there begins another general move to the flight offices until tea-time, when we boil Danny's eggs on the fire and eat them with the Portuguese white bread. After tea, unless your crew is



The half-completed runway of the aerodrome on Terceira. Pilots, crews, ground staff and clerks worked hard at the strip, to complete it in the shortest time possible. Meanwhile, the Fortresses took off, and landed, on the grass. Praia cathedral can just be seen in the distance

(Opposite) Portuguese labourers carrying up metal strips to make the runway

'on ops.', you are free to walk round the cliffs, or go into Praia da Vittoria in the buggies that are waiting outside the aerodrome boundaries (return fare, ten escudos). The drivers whip their horses into a furious canter over the rutted roads and croon encouragement to them by a peculiar hissing whistle.

Praia is built round the curve of a bay, and has a pretty waterfront, with a fish market in the middle of it. A beach stretches under the ridge, but it isn't good for bathing as the sand is really lava dust and very gritty.

The main square in the town is flanked by the second most imposing building in Praia, the police station. The police are better dressed than the soldiers and there are any number of them, in dark-blue uniforms and flat round hats. The most imposing building, the cathedral, stands a little back from the main street, and is built in light beige-coloured stone. The tragedy of Praia is that it is regularly disturbed by volcanic action. The last big eruption took place about a hundred years ago and wiped out the town. Inside, the church is full of incense; and there are altars around the walls to the saints, built for the most part of wax and plaster painted over with bright colours. The altar to St

Peter the fisherman is a reminder of Praia's main industry before the war. Now it seems to be settling down to profit from the proximity of the aerodrome. A good many shops selling watches, lighters and silk stockings have sprung up, trading on the scarcity of these goods in England. A number of bars open onto the street, and are usually neat and clean. They sell steaks and eggs to the R.A.F., with Madeira, or 'Triple Sec', a sickly white liqueur, to wash it down.

The Portuguese are very friendly to us. Nearly every shop-window has a photograph of King George or Mr Churchill, and the airmen, after finishing their work on the Fortresses, used to come into Praia, and, as usual, were better ambassadors of British friendship than all the statesmen in Westminster. Many of them got to know Portuguese families, and by their simple and honest good-nature made an excellent impression on the islanders.

The names of the streets are strange to British ears—Jesus Square, the street of St Michael and St Paul, the street of the 17th of October. Praia is brilliantly lighted at night, and the lamps are left on till dawn. Many times when we took off early in the morning the yellow street lights of Praia would flash





(Left: top) Sunday morning in a small village on the ridge above the aerodrome. Nearly everyone in Terceira, regardless of age, seems to wear a trilby hat and to go to church; (middle) the main square in Praia. The building at the back is the police station, and the patterns of adhesive tape on the windows are a precaution in case of earthquakes. The horse and cart were the main form of transport to and from the aerodrome; (bottom) an old basket worker at Praia starts on a basket from birch twigs. (Right: top) The aerodrome from the ridge. In the foreground are the airmen's tents; (bottom) a Christmas party in one of the airmen's tents. The pineapples, wine and decoration did their best to make up for home fifteen hundred miles away



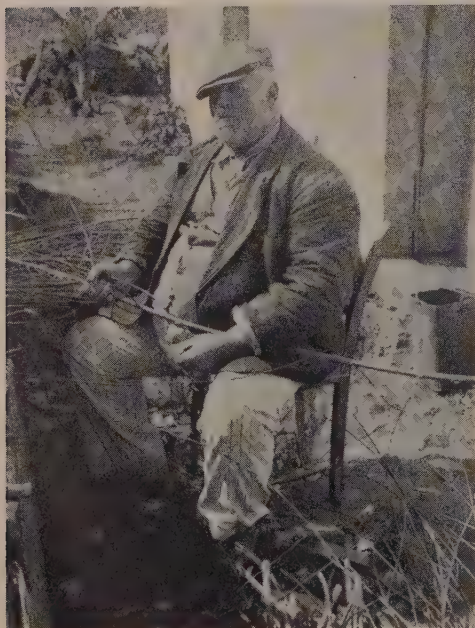
a friendly farewell, winking under the four white-hot exhausts.

Angra do Heroismo, the capital of the island, is twenty miles away over the mountains. The usual method of travel is to hitch a lift on a supply lorry. The road, one of the very worst, creeps up over the high moors which are usually cloaked in thick cloud. Arum lilies and a scrub of wild pineapple plants grow up here, and it is a good spot for shooting wild duck. The way bumps through tiny villages with barracks in them for the blue-coated Portuguese soldiers, and passes a convent or two or a wayside shrine.

Angra itself is a well-built town of white stone with a cathedral in the middle of it. The shops sell the same sort of things as Praia but on a larger scale. A bull-fight takes place occasionally and there is one cinema. The best seats cost a shilling, and for this you sit behind the screen and see the film the wrong way round. There are usually five or six intervals, ostensibly for the patrons to walk about on the promenade at the back and drink Madeira, but really to give the operator a chance to change the reels.

The harbour and the quayside were used by the old Portuguese explorers and the traders with America. Vasco da Gama and Columbus knew Angra well. Pepys, too, came here with the navy of Charles the Second. Apart from these rare visits from the eastern end of the Atlantic, the island has remained happy and contented, its isolation relieved only by a weekly boat to San Miguel and the mainland, until the second world war made it a position of great strategic importance in the battle against the U-boats.

Anti-submarine patrols began from the Azores a few days after the Expeditionary Force had landed. Briefing on the area and







(Left) Very occasionally a U-Boat shows itself to an aircraft on patrol. This oil-streak is coming from a U-Boat that has already been attacked by two Azores-based aircraft. It is moving slowly under the surface, unaware that it is contributing to its own destruction. A relieving Fortress is circling round the oil, and already naval frigates are hurrying to the scene.

(Below) The last round in a fight that lasted over twenty hours. Two frigates have arrived, and are moving to the head of the oil-streak. A short time after this photograph was taken, the navy's depth charges finished off the U-Boat, and the ships rescued the surviving German sailors.



All photographs from the Author

food would take up a couple of hours, and then out to dispersal where the ground crews were already running up the Fortress's engines. When we are airborne the navigator gives the course and gradually the lights of Terceira disappear behind the aircraft. Everyone settles down till dawn; all the lights on the flight deck are turned down, and there are only the phosphorescent gleams of the engine instruments, and a small light on the compass.

"May we test the guns now?"

"O.K. Test your guns."

And for a brief minute there is activity; red tracer makes a momentary pattern in the dark air, and the aircraft reeks of the strong smell of cordite.

"Guns O.K."

Then silence, except for occasional alterations of course, or requests for flame floats from the navigator.

"What did you make the drift on that flame float, rear gunner?"

"Nine degrees port, navigator."

"That's what I made it. Should be about right."

Because of the remoteness of the Azores, radio aids are not so plentiful as in England; and the navigator relies a lot on his sextant to check course and position both by the stars and in the daytime by the sun. He leaves his chart and peers out of the astrodome.

"I'm going to take a shot now, Skipper."

"O.K., navigator."

"Is George in?"

"Yes—George is in."

"George isn't behaving too well, is he? We seem to be bumping about rather a lot."

"There's nothing the matter with George. He's coping remarkably well. We've got a strong beam wind, you know."

"Yes. I'll try to get a shot now."

Dawn seems to break very gradually. The sea below changes colour from black to grey and then to blue. The sun shines into the cabin and everyone settles down to breakfast.

Usually there is tea and pineapple juice to drink. Plain and rather poor-quality chocolate, biscuits, currants, chewing-gum and oranges make up the rest of our meal.

"On patrol now, Skipper" from the navigator.

The crew settle down to look at the sea for the long hours ahead of them. And though the sea seems vacant and empty enough, there are many breaks in the monotony. The sea itself is continually changing its colour, blue, purple, green, black, depending on the state of the sky above it. Long cliffs of cloud show storms on the horizon. There are lots of objects to be inspected in the water, balloons torn off their ships sitting like forlorn Humpty-dumpties tossed up and down by the waves; a straggler from a convoy making a good deal of smoke in an effort to catch up its escort; porpoises, seagulls hundreds of miles from land, red streaks of seaweed, empty rafts and pieces of yellow driftwood, and countless oil patches. Occasionally a dinghy with survivors from an aircraft or a U-boat is sighted. All these objects must be carefully scrutinized, and if necessary reported to Control and shadowed or circled. Sometimes a white wash and a spurt of water excites hope in our hearts for that rarest of all sights—a U-boat; but it is a big whale and his girl friend, lazily

spilling fountains of water over their bodies, and twisting and turning in the sea.

"Looks like an aircraft about eight miles on the port beam." From the mid-upper turret.

We turn towards it, hoping to test our .5's against a Kurier. The engines roar up to full boost and the airspeed increases.

"It's a single-engined job. A carrier-borne Seafire."

We turn back on course. The fighter comes across and sniffs us all over. We take no notice and he soon sheers off.

Very occasionally a U-boat does show up and the hunt begins, with aircraft and surface craft co-operating. Depth charges crash down and raise columns of water round the enemy. If he stays on the surface there is a sharp clash between the aircraft's guns and the U-boat's many weapons. Sometimes the hull is split open by the depth charges and dinghies prove a kill beyond all doubt, but more often there are just pools of oil on the surface of the sea, an unsatisfactory and inconclusive end to the fight for the aircraft circling above.

The day wears on. At last it is time to go home. The aircraft always seems much brighter on the homeward journey. Darkness is falling again as we see the bulk of Pico Alto on the horizon. The lights of Praia are on. We circle over the flare-path, and come in to land.

A day in Lagens has gone on without us; and they are already refuelling the Fortress to go out again. Two other aircraft have gone out to sweep the same area as we were in. They should be on patrol now.

We go into Intelligence and drink cocoa and answer routine questions: Time on patrol? Average height of patrol? Weather in the area?

There is bacon and eggs for us to eat, and after that bed, and a day off the next day. Life seems suddenly very pleasant. Not that much has been seen—but there is a feeling of satisfaction that the area has been swept clean. At the time that we have been on patrol, aircraft from Iceland, Ireland and the east coast of America have been out searching too. We have completed the ring round the U-boats from our island base. Terceira has meant that the German Navy have now no way of escaping from the vigilance of long-range Coastal Command aircraft.

What is Weather?

by F. D. OMMANNEY

THE world is a sphere surrounded by a thin film of gas, or rather a mixture of gases, known as the 'atmosphere'. So thin is this film that, in comparison with the size of the earth, it resembles the tissue paper wrapping round an orange. The mixture of gases, mainly oxygen and nitrogen, which makes up the atmosphere is the air we breathe. The weather is due simply to movements of air about the earth's surface both in a horizontal and a vertical direction and to variations in the amount of moisture which the air contains.

The envelope of air which surrounds the earth has a definite weight although we are not conscious of it. The weight of the air can be measured by means of an instrument called a barometer—literally a 'pressure measurer'.

The earliest barometer was invented by Torricelli, Galileo's assistant, in 1640. It has changed little in essentials since his day when it consisted simply of a glass tube, open at one end, filled with mercury and inverted with its mouth underneath the surface of mercury in a dish or container. The mercury stands up in the tube to a height of about thirty inches because the weight of the column of air over the dish presses on the surface of the mercury and forces the column up the tube. If you were to carry your dish and tube up to the top of Snowdon you would find that the column would not stand quite so high because the column of air above the dish would be shorter and therefore lighter.

If you watch your column of mercury standing in its dish from hour to hour you will see that the height of the column varies. The weight or pressure of the air upon the dish is, in fact, changing all the time and these continual changes in the pressure of the air over the earth's surface accompany and signify the movement of air from one part of the earth to another.

* * *

Meteorologists work by means of weather maps. On these maps they plot as many simultaneous weather observations as possible, each showing, among other things, the pressure and the wind force and direction at a great many places at the same moment. Lines of equal pressure, called 'isobars', are

drawn through the points on the map where the pressure is the same. When the map has been drawn it is always found that the lines run in orderly patterns more or less concentrically around areas on the earth's surface where the pressure is high and where it is low.

The areas which the isobars enclose where the pressure is low are called 'cyclones' or 'depressions'. In general, they are bad weather areas and are marked by zones of low cloud, rain and often wind. The areas where the pressure is high are called 'anti-cyclones' and are in general, near their centres, good weather areas with light winds and often, though not always, broken cloud.

* * *

One of the few inflexible laws with which we have been able to pin down the weather refers to windflow.

If you stand facing the wind in the northern hemisphere, the depression is on your right. In other words, the wind blows anti-clockwise round depressions and clockwise round anti-cyclones, approximately parallel to the isobars. The exact opposite is true in the southern hemisphere, and if you stand facing the wind the depression is on your left. There, the wind blows clockwise round depressions and anti-clockwise round anti-cyclones. This is called 'Buys-Ballot's Law', after its discoverer.

When the wind changes its direction in a clockwise sense it is said to 'veer', and when it changes in an anti-clockwise sense it is said to 'back'.

* * *

Air carries with it a varying amount of water vapour derived by evaporation from the wet surfaces of the earth, from the oceans, the lakes and the rivers. The amount of water vapour which the air can contain depends on the temperature. Any volume of air has a fixed amount of water vapour which it can hold at a given temperature and at a given atmospheric pressure. In the same way you can only dissolve the same amount of sugar in any number of exactly similar cups of tea if they are all at exactly the same temperature and atmospheric pressure. But if you heat one of your cups of tea you will be able to dissolve some more sugar in it. Similarly, if you heat one of your volumes of air it will



G. L. Hogben and E. C. Humphreys

A weather chart of the North Atlantic on a July day in a year before the war. The main features used by the forecaster are shown, with symbols representing the types of weather cloud and wind which he would expect and the regions where he would expect them. In order to draw the fronts and isobars shown here the forecaster had plotted on his chart some hundreds of simultaneous observations from land stations and ships all over the area

An isobar is a line passing through places where the pressure is the same; e.g. the line labelled 1012 passes through places with pressure of 1012 millibars

Cold front is a boundary line where cold air replaces warmer air

Warm front, where warm air is replacing colder air

Occlusion, where the cold front has caught up the warm

These three types of front mark the polar front shown between the tropical and polar air

The pressure centres, denoted by the H's and L's, correspond to the centres shown by the isobar pictures:

L₁ is an old, disappearing depression

L₃ is a fledgling, newly formed depression

L₂, in its prime, is about to bring bad weather to Britain

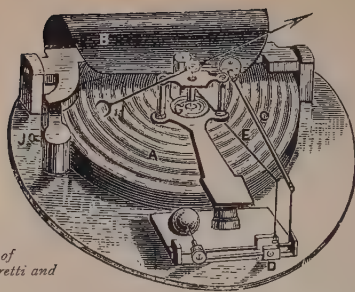
L₄ is a weak depression of another series

L₅ is a second of the same series

Returning polar maritime air has come from the polar regions south across the ocean, and is now moving back again to the polar regions

Polar Maritime air is cold polar air modified by a sea passage

Polar Continental air has travelled only over land, from the polar regions



By courtesy of
Messrs Negretti and
Zambra

(Left) Early siphon barometer by Isaac Robelon, dated 1719. The tube is graduated from 0 to 36 in eighths of an inch and the corresponding weather indications are given in Latin and English from "storm" to "great drought". The thermometer attached is graduated from 0 to 90 in each direction from the zero, which indicates "temperature weather", the limits being marked "excessive cold" and "excessive hot weather". The graduation is a form in use before the introduction of Fahrenheit and other scales. (Above) The 'works' of an aneroid barometer. 'Aneroid' means "without wet or damp". The mechanism consists of a flat metal box, from which the air has been exhausted. The box has an elastic lid which rises or falls as the air pressure respectively decreases or increases. This movement, magnified by a system of levers, is communicated to a moving pointer. In the more delicate mercurial barometers changes in atmosphere pressure are recorded by the rise and fall of a column of mercury. (A is the corrugated vacuum box; B curved spring; C compensating metal bar; D lever; E fine chain; H pointer; J exhausting tube)

take up some more water vapour. If you cool it down again to the original temperature this extra water vapour will condense out as tiny droplets of steam.

When air contains the maximum of water vapour which it can hold at a given temperature and pressure it is said to be 'saturated'. The temperature at which it can hold no more but drops its excess as condensation or steam is called the 'dew point'.

Now when air is heated at sea level, for example by hot sand, it expands, becomes lighter, and may rise. As it rises it cools. At a certain height it reaches a temperature at which it can no longer hold all its moisture. The height to which the air can rise before this happens depends on the amount of water vapour which it contains and also on its temperature at the start of its ascent.

If there is only a little water vapour in it the air can rise a long way before it has to drop the water vapour, but if the air is nearly saturated, that is, if it is holding almost all it can, it will have to drop some of the water vapour at a low level.

By such condensation of water vapour from rising air clouds are formed. They are simply vast masses of dropped water vapour floating aloft as tiny droplets. When these droplets become so large that they can no longer remain afloat they fall, as drizzle if they are very small, or as rain if they are larger.

Everyone knows that there are many different kinds of cloud. Indeed you might suppose that the variety of their form was infinite. Yet we can classify clouds and place them in categories both according to their height and to their shape.

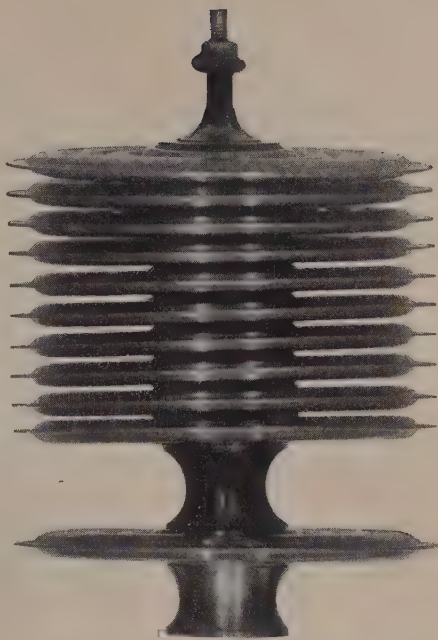
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Fog and mist may be described as 'clouds down to the earth'. We speak of fog when the visibility is less than 1000 yards and of mist when it is between 1000 and 2000 yards. When the visibility is over one mile but under five miles we speak of 'haze'. This last, however, is a vague term, for it also covers the obscurity due to smoke particles in fine summer weather when the air is not rising and there is no wind to blow the smoke away.

Fog may be due to several causes but we can only mention here two common types.

'Ground fog' is a land phenomenon, though once formed it may drift out to sea upon the wind. It is caused by cooling of the air in immediate contact with a cold land surface, generally on clear nights. Sufficient cooling causes it to drop its moisture. Two critical factors in the formation of ground fog are the strength of the wind and the amount of cloud. If there is no wind the air does not get stirred up enough to communicate the cooling effect to the layers more than a few inches above the surface, so the moisture drops as dew and there is no fog. If there is too much wind, no part of the air remains long enough in contact with the ground to become cooled to the dew point and so, again, no fog is formed. The most effective amount of stirring action is given by a wind of about six knots, which will just rustle the leaves of the trees. Then the cooling effect is communicated higher and higher and the moisture which condenses out remains in suspension as fog. Again, ground fog will not generally form on cloudy nights for cloud cover prevents the escape of the earth's heat into space.

Look out for ground fog, then, on clear,



By courtesy of Messrs Negretti and Zambra

The stack of diaphragms from a barograph, a recording barometer with a pen arm that makes an ink record on a revolving paper chart. The sensitivity and accuracy of the instrument are centred in these diaphragms. As can be seen in the illustration, there are ten metal discs or boxes, moulded in such a way that they are elastic. Each contains a measured amount of dry air and the whole series stands upon an eleventh flexible box

cold nights when there is a light wind that you can just feel on your face.

'Sea fog' is another type of fog that occurs most frequently in the spring around our western coasts. It is due to the cooling of moist warm air to its dew point by passage over a colder sea. It tends to occur most commonly in the spring when warm moist air from the south of the Azores is carried in a north-easterly air current over our colder waters which, at that time, are at their coldest.

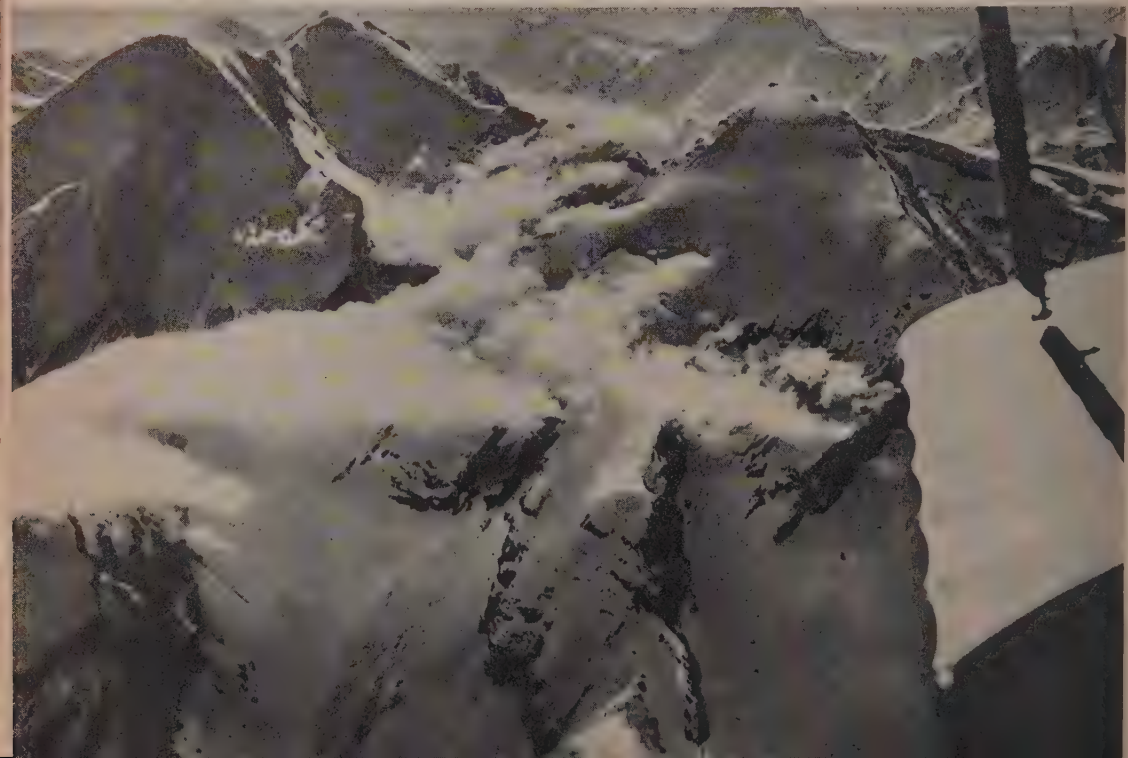
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It is not only by surface heating that air may be compelled to rise and drop its moisture. The flow of air from one part of the earth to another necessarily means that streams of air of different temperatures and water vapour



Photographs from 'Beauty of Flight'. Miles

(Above) View from an aeroplane of mixed cloud types, showing, in particular, the sprouting heads of the cumulus clouds bursting through the strato-cumulus layer. (Below) A bird's-eye photograph of valley and mountain. The topography of land areas may have a great effect on weather. In the valleys the weather may seem to be cloudy or overcast but in the uplands it is fair. A weather forecaster has to be extremely careful in order to give the most accurate possible forecast. A forecast for the whole of the area shown would have to be worded to avoid giving an impression that the weather was everywhere cloudy, or everywhere fair





This photograph is remarkable in that it shows a convection cloud formed by artificial means—a sugar-cane fire. It illustrates perfectly the fundamental cause of the cumulus cloud—the warming of a mass of air to such an extent that it rises. The special circumstances illustrated here caused a very marked effect, which shows itself in the appearance of this cloud

content, and having other differences, are carried away from their areas of origin and come into contact with one another over vast stretches of the earth's surface. Across the North Atlantic, for instance, there stretches the line of demarcation between the cold, dense air from Northern Canada and Greenland and the warm, humid, lighter air from the sub-tropical Atlantic. These two sorts of air do not immediately mix. A boundary line persists between them not very unlike that between oil and water in the same glass. But in the same way as the denser water sinks down to the bottom of the glass beneath the oil, so the heavier cold air tends to sink beneath the lighter warm air and to lift it up. This vertical surface between the two sorts of air becomes sloped, with the cold air cutting in under the warm. Such dividing surfaces between two different sorts of air are called 'fronts', and since air is being forced to rise along them, they are marked by belts of low cloud and rain.

The dividing line which stretches north-eastward over the North Atlantic is called the 'Polar Front'. Over the Western Atlantic waves form on it and travel away along the front across the ocean, increasing as they go. The crests of the waves become the centres of depressions which deepen as the waves increase, the winds blowing round them anti-clockwise. In the heart of each depression there projects a wedge of warm air in the form of a wave which is being steadily undercut by the cold air before and behind it and lifted off the earth's surface. There is thus a broad belt of rising air which, as any air must do when it rises, drops its moisture as heavy banks of cloud, as rain and sometimes as fog, thus causing the bad weather associated with the word 'depression'.

As a depression with its wedge of warm air moves eastwards a place on the earth's surface at A, for instance, passes from cold to warm air and back again from warm to cold as the wave passes over it.

The forepart of the wave, where you pass from cold to warm air, is called the 'Warm Front'. The rear part, where you pass back again from warm air to cold, is called the 'Cold Front'. The wedge of warm air between the two is called the 'Warm Sector'.

Now the cold front in the rear of the wave moves faster than the warm front and overtakes it, so that the wave, as it progresses eastwards, begins to close up from within the circle outwards. The closed part is now called the 'Occlusion' and the depression is said to be 'occluding'. The warm air at the

occlusion is now lifted right up off the earth's surface and the two streams of cold air in the cold sector on either side come into contact beneath it.

The warm and cold fronts, the occlusion and the warm sector bring their own characteristic types of bad weather. The apparently endless and perplexing variety of our weather is largely accounted for by the passage near our islands of these depressions with their fronts. They pass from the Western Atlantic mainly north-eastwards through the gap between Iceland and the North of Scotland, though there are many variations in the path which they may take. Some come south over the British Isles while others sweep far to the north-westward over the Denmark Strait. With a series of weather maps in front of him the forecaster can judge the speed and direction of these advancing depressions with their fronts, but even without these aids you may discern in the barometer and the sky the signs of their approach.

* * *

Currents of air reach us from all sorts of different directions according to where the centres of high and low pressure are situated and according to their direction of movement. But most of our depressions pass to the north-westward of us so that their southern limb strikes our shores and gives us our prevailing south-westerly wind. But air comes to us from all sorts of other directions as well. Broadly speaking, and with some variation, each kind of air stream brings its own kind of weather according to its source of origin. The air that reaches Britain has either come from colder polar regions or from warmer sub-tropical climes. Owing to our island situation it can reach us from over the continent or over the sea, and the weather which it brings will be different according to the course it has taken to get to us.

South-west winds, broadly speaking, have come from the warmer waters of the Atlantic to the southward and are being cooled at the surface by the sea as they travel towards us. Therefore they bring warm moist air with much low cloud which may descend as drizzle near the coast. In the spring, when the sea is at its coldest compared with the air, they may bring fogs around our western approaches.

North-west winds are the exact opposite of this. They usually bring cold air from polar regions, which is being warmed at the surface by the relatively warmer waters around our coasts. The air, therefore, has a great tendency to rise and form high towering



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Ships in convoy passing through 'arctic sea smoke', a rare type of fog confined to high latitudes and giving an impression of a boiling sea. Here the sea smoke is at its first stage of formation. Later it may build to a considerable height and density and become a menace to shipping

cumulus clouds. Showers fall from these, sometimes as hail, and, if the wind is fresh, the uprushing turbulent air will bring gusts and squalls. A north-west wind nearly always backs to the south-west before long with the approach of another depression. Hence the saying, "A nor'-wester is never long in debt to a sou'-wester".

According to whether it streams from the sub-tropical south or from the polar north around a depression near Iceland, a westerly wind brings weather characteristic of a south-west or of a north-west wind.

Easterly winds nearly always come to us over the great land spaces of the continent and so are warm in summer and cold in winter. Often they pick up moisture over the North Sea and bring dull overcast skies to the east coast. If blowing from the south-east they bring smoke haze from the industrial regions of Belgium and the Ruhr.

* * *

You may say that the weather will remain characteristic of its air stream until the air stream is changed. Fronts mark abrupt changes between air streams, and when they pass over not only do we pass from the weather of one air stream to that of another but we experience the characteristic bad weather which the front itself brings.

At the warm front the warm air is rising fairly gently. It produces sheets of cloud and continuous rain, sometimes with mist and fog.

If the sky is clear the warm front shows

signs of its approach from the west when it is still 250-500 miles away at the surface. The first sign in a clear sky is the appearance of wisps of cirrus cloud, usually in isolated bundles, or pot-hooks. These should not be confused with mares'-tails, which, if abundant, denote wind—"Trace in the sky the painter's brush, the winds around you soon will rush". But if you watch the sky where the pot-hooks are you will see that soon it becomes wholly or partly overspread by a gauze-like film. The sun or moon are still visible but often surrounded by a halo. A halo, then, foretells an advancing warm front with rain soon. "When the sun is in his house, it will rain soon." "The moon with a circle brings water in her beak."

If the sky is not clear but covered with low cloud you may miss these early signs, although you may detect the veil behind the low cloud. But, unless the low cloud is very thick, you will not miss the next stage for the veil thickens and lowers to form the 'ground-glass' or 'wet sky'. It is thin at first and a hazy sun or moon may still be visible, but it slowly thickens and lowers. Rain or drizzle begins to fall, sporadically and gently at first; the warm front is now about 100 miles away at the surface. As it continues to approach, the cloud pall lowers and thickens and heavy stratiform clouds overspread the sky. Rain becomes continuous and fog or mist may develop.

Most warm fronts approach on a backing and increasing south-west wind and the glass falls steadily as the front approaches. As it

passes over, the glass begins to fall less steeply and the wind veers from a south to south-westerly and then to a more westerly direction.

Now we have passed from the colder into the wedge of warmer air and are in the warm sector and notice accordingly that the weather has indeed become warmer. The sky may remain overcast with some drizzle or it may clear temporarily. The visibility becomes clearer and there may, in fact, be a temporary improvement in the weather; but the glass is still falling and soon the clouds return with the approach of the cold front.

Along the cold front air is rising swiftly. Large towering cumulus clouds with sharp heavy showers of rain, sometimes with hail and thunder, occur along the cold front with squally winds sometimes, though usually only for a short while, reaching gale force. Mackerel sky is common near the cold front, and for a short while behind it also you may see the wet-sky and the veil with a halo round the sun, but they do not last long. At the cold front we pass out of the warm sector into the colder air again so that you notice that there is a nip in the air once more. The glass rises sharply as the cold front passes over and goes on rising behind it. The wind, which had been about west-south-west in the warm sector, veers, often quite suddenly, at the front itself to west or north-west. Behind the cold front the weather remains showery since we are now in cold polar north-westerly air, but the glass rises steadily and the weather improves, slowly if the wind veers south of west, quickly if it is north of west, and the wind decreases as the depression moves away north-eastward. In due course the wind backs to the south-west again as a further depression advances towards our coasts.

The weather at an occlusion combines that of a warm front and that of a cold. There is low cloud and rain, squalls and a sharply veering wind. The sky signs are usually those which precede a warm front. The glass falls steeply with the wind southerly and rises behind it again with a cold wind from the south-west to north-west. The difficulty is to know whether it is a warm front or an occlusion which is approaching when you see the veil and the wet-sky in the west.

Without a weather chart this is difficult, but you may, perhaps, say that if there is no marked rise in temperature and the glass goes up and keeps on going up after the front has arrived you have probably passed through an occlusion and the weather will improve. But if there is a rise of temperature—if people say “It’s become much warmer all of a sudden”—and the glass goes on falling, then there is more trouble to come, for the cold front is on the way and no improvement can be expected until it has passed.

None of these rules for the weather at fronts can be looked upon as inflexible. On their passage to us over the Atlantic the fronts, looping from one depression to another, fall into all kinds of groupings and shapes. They move at very varying speeds and sometimes get stuck in one place for days at a time, producing long and disheartening spells of gloomy wet weather. But the more you study them the more astonished and baffled you will doubtless become at the variety of conditions they produce.

Assuming that you have only your eyes and a barometer—or perhaps I should say ‘a weather glass’—to help you, I give below, with all diffidence, a few hints on the commoner weather signs. Some of them may seem obvious when read in black and white but no apology is offered for that, for in weather science nothing is obvious.

* * *

Your barometer tells you, in the very broadest terms, whether the weather is likely to change or stay as it is, whether it is likely to improve or get worse. It will also give you, usually but not always, short-term notice of approaching gales.

A falling glass means deteriorating weather. A rising glass means that conditions will, if the rise is maintained, eventually improve. A steady barometer means that conditions will remain much as they are for perhaps another twelve hours.

If the barometer falls rapidly and the wind backs you may safely predict a gale within twelve hours and a sharp veer of wind at a cold front or an occlusion. The more pronounced the backing the greater the gale and the more marked the veer. The gale will continue on the rising glass for some hours. Indeed, the gale may not come until the glass

does begin to rise. Gales on a rising glass are squally.

A long steady fall of the barometer indicates an approaching bad spell of some length, but a sudden pronounced fall usually means a shorter spell of bad weather. "Long foretold, long last. Short notice, soon past."

In the British Isles a rapidly falling glass usually gives a southerly or south-westerly gale and a rising glass a north-westerly or northerly gale.

But remember that gales are usually caused by a steepening of the pressure gradient—the difference in pressure between two points on the earth's surface. Your glass records the pressure at one place only, the place where it is. It tells you nothing about the pressure elsewhere. Therefore a gale may easily arise without appearing to affect your barometer at all and without showing any preliminary signs on it.

* * *

The clouds, the colour of the sky and the clarity or otherwise of the atmosphere are further useful guides to the weather.

In general, low clouds tell you little about approaching conditions. They tell you rather about present weather since they are formed by air rising locally for one reason or another.

High and medium clouds betray what is going on in the upper layers of the atmosphere and therefore help you to guess at what lies ahead.

As a rule you may say of clouds that when they tend to lower and thicken there will be rain and foul weather. When they tend to lift and thin out there will be a clearance and an improvement. A small patch of blue—a 'Dutchman's trousers'—appearing in an overcast sky foretells a clearance.

* * *

A 'low' sunset, with the sun setting on the horizon beneath a bank of cloud, is a good sign for it means that there is no front

approaching at present, but a 'high' sunset, with the sun setting behind a bank of cloud, may indicate an advancing front and is a bad sign.

A rosy sunrise usually precedes bad weather and a rosy sunset good weather.

Red sky at morning,
Shepherds' warning.
Red sky at night,
Shepherds' delight.

But this is not a very good rule by itself and the type of cloud should be taken into consideration. If the redness is caused by high or medium clouds spreading from the west bad weather nearly always follows. But red low clouds at sunrise do not necessarily mean bad weather.

* * *

Very clear weather, with distances very distinct, and a falling glass, usually indicates the approach of a warm front. Hard emphatic colours also mean rain, while soft pastel shades mean good weather. Dust haze and smoke haze in summer may mean sinking air and good weather for some time.

* * *

At sea, the weather obeys such rules as there are less unfaithfully than over land, where hills and mountains alter the direction of winds and cause up and down draughts. Land may cause local land and sea breezes, may hold up depressions and fronts and generally tends to make its own weather. So never expect too much from any rules. Each locality has its own individual tricks and two neighbouring valleys may experience different weather on the same day. You are not likely to arrive at a new place for your holiday and at once make successful guesses about the weather. Ask the local inhabitants. They will know more about the local weather than all the experts.



Some Little-Known Kent Churches

Notes and Photographs

By A. H. and Winifred A. Siminson

St Mary, Capel-le-Ferne (above). A small 13th-century building, situated in a lonely spot nearly two miles off the main Dover-Folkestone road. Its principal feature is the fine chancel screen of three arches. Only two such exist in Kent. (Opposite) St Thomas à Becket, Fairfield. In the extreme west of Romney Marsh stands this smallest of Kent churches, surrounded by a dyke. The interior is remarkable for its massive timbers and its 14th-century roof. Six box pews fill the nave.







St Nicholas, Harbledown (opposite, top). Approaching Canterbury from the Sittingbourne Road, this Norman leper church is predominant. Its treasures include a 15th-century font, ancient benches, tiles and some 500-year-old glass. St Giles, Tong (opposite, bottom). In the 12th-century nave, remains of early frescoes are still visible. Three massive piers support the Norman arches of the narrow north aisle. Choir stalls and screen are 15th-century. (Above; left) The Priory Church, Davington. Built in the 12th century: a lofty church with a magnificent Norman doorway. Its carved pulpit and two 16th-century brasses are gems; (middle) St Mary, Little Chart. Richly coloured sculptures of kneeling figures, on wall monuments and tomb, depict members of the Darell family in this north Chapel; (right) St Mary, High Halden, three miles from Tenterden, is worth visiting for its 14th-century timbered tower and lobby, an unusual south porch and a 12th-century font. (Left) St Mary, Chartham. Few country churches possess a roof which can surpass this oak-ribbed specimen of intricate design, culminating in vaulting, in the centre of the transepts



St Mary of Charity, Faversham. Entering the church, through the south porch, one is impressed with the spaciousness of this imposing building. Its length is 160 ft., and with transepts 124 feet wide, it contains many sculptures and brasses, an Easter sepulchre, a good 14th-century chest, and some superb miserere stalls. (Opposite; top) St Nicholas, Ash. Ash is an old village three miles from Sandwich, its outstanding church has a lofty tower, surmounted by a spire, which is a landmark. The arches of the north aisle are 13th-century. A number of interesting monuments are in the chancel and Molland chapel; (bottom) St Nicholas, Throwley. Surrounded by cherry orchards, a church with Norman and Early English work, possessing carved miserere stalls of the 15th century, an ancient benetura, windows of delicate colouring, and, in the Sondes chapel, some beautifully carved tombs with kneeling figures on them





Watching Hedgehogs

by B. MELVILLE NICHOLAS

SOME of my most successful studies of these prickly people have been carried out in a small meadow near my late home where, on almost any evening, two or three hedgehogs could be seen hunting the hedgerows for worms, slugs and similar fare. They did not hunt together and so far as I could see there was little neighbourliness among them. Each seemed to go its own way, look after its own affairs and be responsible for its own home. On many a spring evening, just as the daylight begins to fade, I have crept into the meadow to watch them.

Hedgehogs when leaving home are less nervous than foxes or badgers, and the fact that I knew where some of them lived made it possible for me to wait and watch outside their residence until a shuffling sound from within told me that they were about to venture forth. But hedgehogs move slowly and minutes usually passed before they actually presented themselves. Although I usually stood in full view, hedgehogs thus leaving home would as a rule ignore my presence and go about their normal task of finding supper.

Because of the deepening darkness it was difficult to follow the animal's every movement, and although I always carried a powerful torch the sudden appearance of a ray of light had the very opposite effect to what I intended; the hedgehog quickly rolled up into its prickly coat. Yet the torch did reveal one or two interesting episodes, as on a certain

evening in April when through the deepening shadows I watched a hedgehog approach a small pool, visited only by thirsty wild creatures, and then heard some hoarse squeaks; immediately I switched on my torch to find two hedgehogs holding a conversation in the centre of the pond. Of course the light disturbed their interview, but I was able to watch them both swim to the nearest reed-bed and disappear. The spring months are busy months for hedgehogs, and on almost any evening a careful observer is able to see wedded couples foraging in the hedgerows, or collecting materials for home-making.

Baby hedgehogs are seldom born before June, but two litters are sometimes raised in a season, which means that the advent of the second family may not take place until August or September. Whether these late-born youngsters survive the winter is doubtful. During the breeding season the wedded pairs generally live together, or in separate residences close to one another, associating during their nightly excursions and jointly sharing all domestic and family burdens.

The most likely place to find a hedgehog's nursery is in the tangled herbage of the hedgerows, or beneath low-growing bushes, or down a rabbit hole, where, in preparation for the arrival of their family, the parents gather an enormous quantity of grasses, leaves and moss, afterwards making them into a warm and cosy bed. Many stories are told of the way in which hedgehogs collect home-making



Photographs by the Author

In the evening hedgehogs can sometimes be seen hunting the hedgersaw for worms and slugs. They generally work singly, each winding its own business and looking after its own home. A full-grown hedgehog is about nine inches long and four or five high. Its prickly spines are at most an inch long



materials; one of the strangest says that the animals roll themselves over and over on the leaves and moss they wish to carry off, until the latter get impaled upon their sharp spines, thus enabling the animals to walk home comfortably laden. Such a theory is, of course, based on fancy rather than fact, and no one seems to have thought how the hedgehog manages to free itself of the load.

Hedgehogs at birth are about an inch in length, with top-heavy heads and blind. At first their coat consists of white, flexible spines, and while in this stage the youngsters may be handled freely. When about a week or ten days old their eyes open, and a further similar period sees them restlessly moving about in their nursery. But their mother is anxious for their welfare and seldom allows them to take a peep at the outside world until they are able to roll themselves into their defensive shield of prickles.

The youngsters themselves, however, do not realize the dangers to which they are exposed and are inclined to be unduly optimistic about

taking their evening strolls. Perhaps that is why the parents take the family with them on their foraging expeditions, hoping thereby to impress upon them the need for constant vigilance. An adult hedgehog is always on the alert and ready to resort to the protection of its prickly armour. When tightly rolled up, with all its vulnerable parts protected, it has little to fear from its natural enemies. I have seen many a hard-mouthed terrier withdraw from such a prickly shield, against which the fox, too, has to admit defeat. Nevertheless the badger, by using its strong claws, does occasionally cause the hedgehog to unroll.

Normally, hedgehogs are inoffensive animals and seldom quarrel among themselves, except during the pairing season when the males become aggressive towards each other. The fight is fierce and sustained and I have known instances where it has ended fatally. Considering the general slowness of the hedgehog, I have often been amazed at its agility when in combat and also at its ability to



Young hedgehogs are usually born in June or August. This mother (opposite) has two babies—

—at first they are top-heavy, and blind, (above) with a coat of white flexible spines



(Right) His suspicions aroused, he is preparing to roll up into a ball

climb. A friend of mine once caught a hedgehog and released it in a walled-in garden. An hour later when I chanced to call at his home he took me into the garden and we found the hedgehog climbing a pear tree. It seemed to experience no difficulty whatever, and eventually reached a branch from which it dropped onto the top of a wall. My friend ran to recover it, but was too late, for without the slightest hesitation the animal disappeared down the other side. Actually, and I have watched similar feats many times since, a hedgehog *falls* rather than jumps, and the moment it releases its grip, rolls itself into a ball, so that the prickles take the shock.

Although, on the whole, the hedgehog is a silent animal, it has a vocabulary of low grunts and squeals heard mainly during the pairing season. A pet hedgehog I once had snored loudly when asleep, and a pair of baby hedgehogs, born in my garden, had rather high-pitched voices. The most piteous sound a hedgehog utters is when it is suffering, and two of us once walked half a mile in a down-pour of rain to discover that the heart-piercing wail we had heard was made by a hedgehog caught in a steel-toothed trap. Nevertheless from time to time observers have reported having heard various noises made by hedgehogs, to which sounds they have given such varied interpretations as "snuffles", "quackings" and "mews".

In fact hedgehogs have been the subject of many queer stories and superstitions, the most commonly believed being that they suck the milk from cows, but nothing, in my opinion, could be further from the truth. It must be admitted, however, that most hedgehogs are fond of milk and, even in a wild state, will readily partake of it. I have proved this by placing saucers of milk near their homes, and then, with the aid of my torch, seen them enjoying their supper. One hedgehog, whose home was beneath a stick-heap in my garden, liked a sop or two of bread in the milk and eventually became so friendly that he did not object to my presence at meal-times.

A hedgehog will eat almost anything it can catch and kill—worms, slugs, mice, frogs and even adders, for though the infuriated viper immediately strikes back with bared fangs and with all its fury, its poisonous weapon is ineffective against the hedgehog's spiky armour. 'Parker', a pet hedgehog I once owned, was clever at killing adders and fond of eating them too. The first one I saw him kill was in the orchard; it was rendered helpless with Parker's first bite; of course, I

regarded it more as good luck than good judgment that the hedgehog managed to grip the viper near its head, but when on many subsequent occasions I saw him achieve the same feat, I became quite proud of my hedgehog. Near to my home there lived, at that time, a man who could handle adders quite freely, or, to use his own term, 'charm' them. He kept Parker well supplied with snakes, bringing them to him in his pocket, or carrying them in his hand without their attempting to harm him. Parker killed them all by awaiting his opportunity to bite them on or near the head, after which it was only a matter of minutes before he began to eat them, always beginning with the tail end.

There is evidence that occasionally a hedgehog varies its normal dietary, and feeds on the eggs or young of ground-nesting birds, but that does not imply that egg-stealing or baby-snatching are normal tendencies in hedgehogs generally. Gamekeepers will not tolerate hedgehogs, 'urchins' as they commonly call them, because of the damage they suspect the animals to be guilty of, and while the hedgehog is not blameless in this respect, many of the crimes and outrages attributed to it might more justly be charged against its more blood-thirsty neighbours.

The hedgehog is one of our classic examples of hibernation, and as soon as the chilly autumn winds betoken the dawn of colder weather, it begins to collect leaves and grasses to construct its winter dormitory. Then into bed it goes, rolling round and round until it is warmly covered with bedding. Its sleep is sound; so sound that I have often handled the sleeper without disturbing it. I have noticed, however, that a gentle warmth revives a sleeping hedgehog more quickly than it does a dormouse. The warmth, of course, thaws the cold blood, so that eventually activity returns. Which, in reality, is what happens when the warmer weather of spring comes, and the sleepers of the countryside resume their normal life again.

With all hibernating animals the return to activity is gradual, and at first the hedgehog merely turns and stretches in its hibernaculum; but as the weather increases in warmth, short walks are undertaken and all available food indulged in until the friendly little hedgehog becomes its normal self again. Hibernation, however, is regulated by climatic conditions, and I have found that the sleep of hedgehogs living in our southern and south-western countries is not nearly so prolonged as that of their brethren in the extreme northern parts of the country.

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